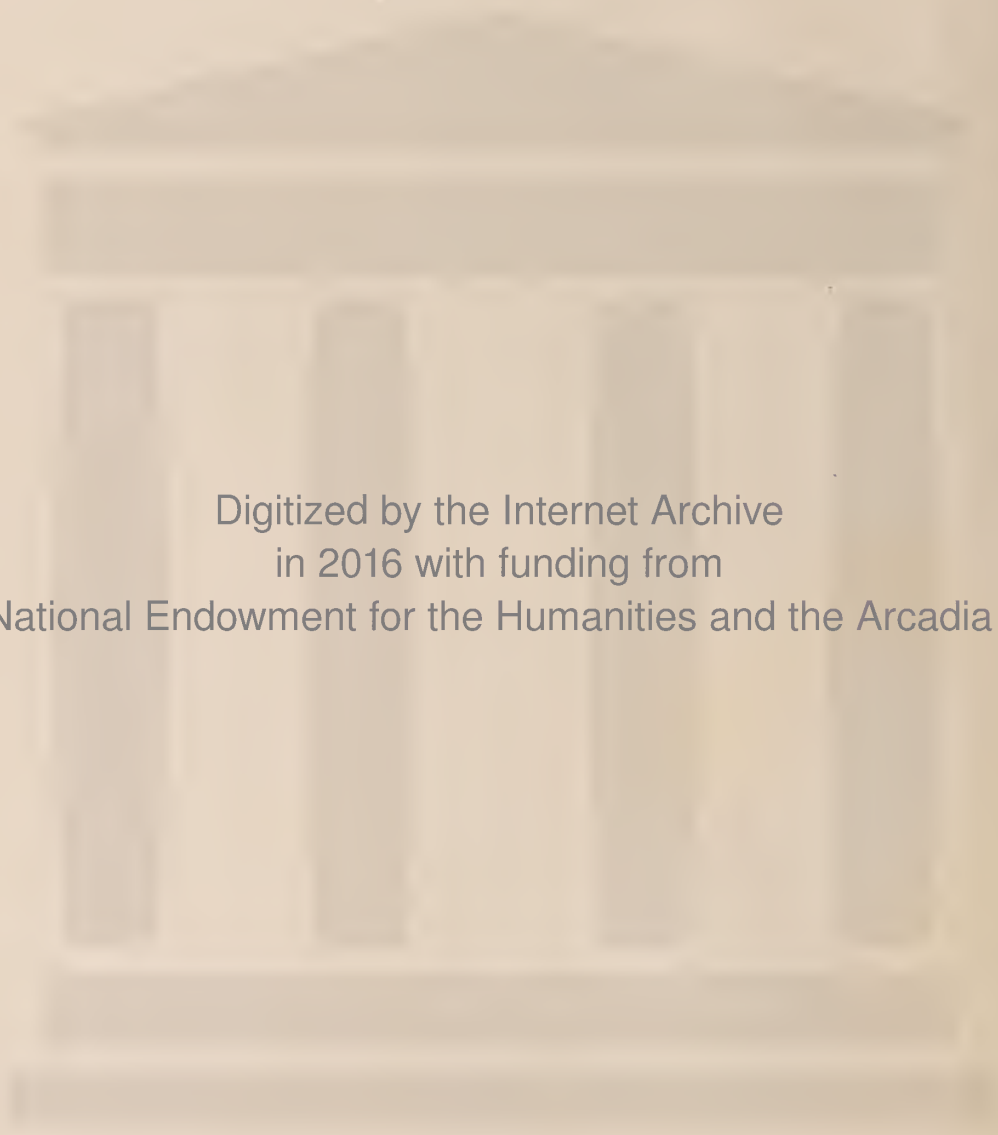
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Southwestern MEDICINE

Official Journal of The Southwestern Medical Association, The Western Association of Railway Surgeons, The Texas Orthopaedic Association, The Southwest Obstetrical and Gynecological Society, The Southwestern Dermatological Society, Texas District One Medical Association, The Southwestern New Mexico Medical Society, and El Paso County Medical Society

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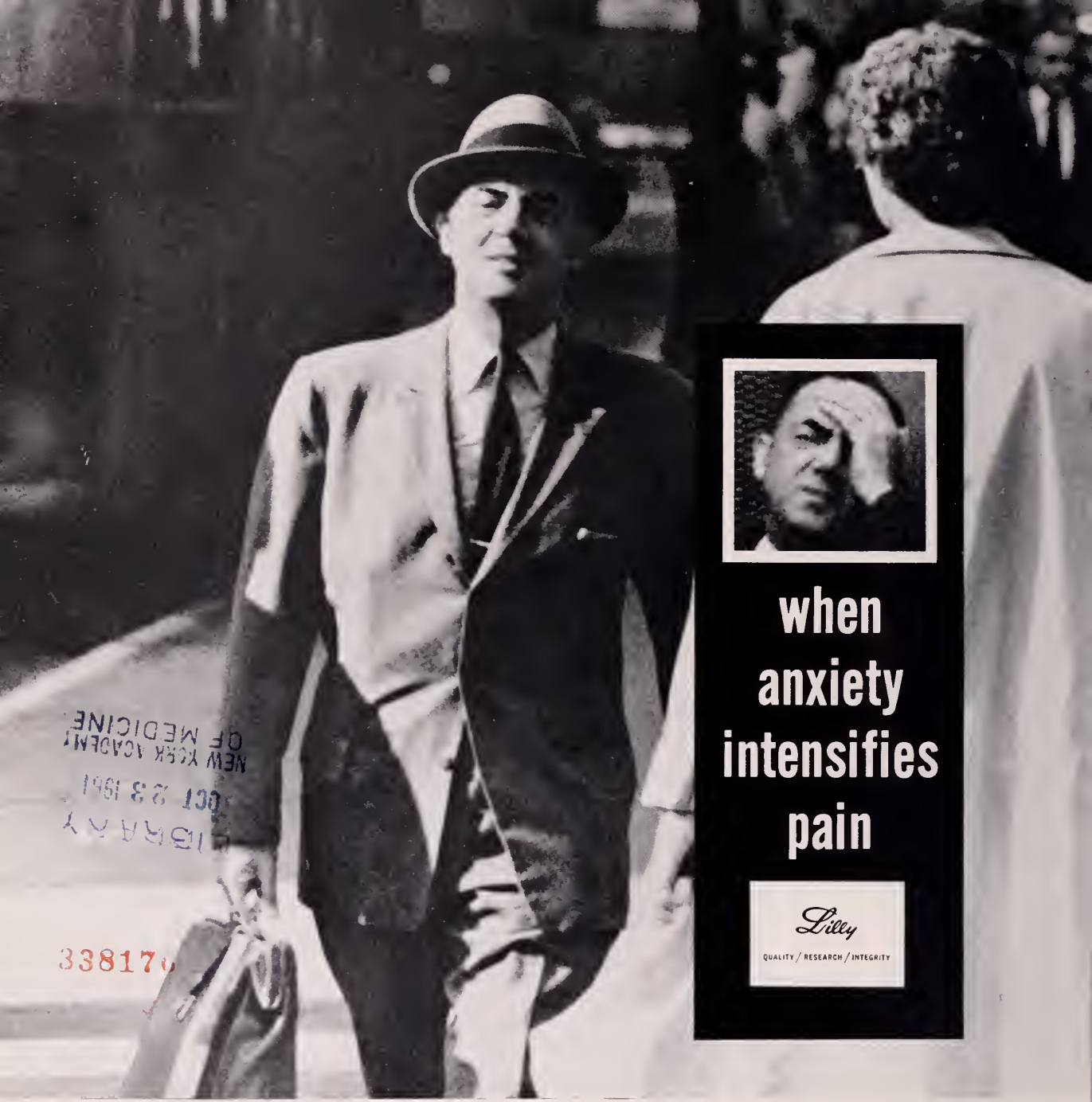
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*Brown, S. S.; Libo, H. W., and Nussbaum, A. H.: Norethandrolone in the Successful Management of Anorexia and "Weight Lag" in Children, Scientific Exhibit presented at the Annual Meeting of the American Academy of Pediatrics, Chicago, Oct. 20-23, 1958.

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Coming Meetings

International Medical Assembly of Southwest Texas, 24th Annual Meeting. Hilton Hotel, San Antonio, Jan. 25-27, 1960.

Texas District One Medical Association, Annual Meeting, Pecos County Club, Pecos, Tex., Feb. 5, 1960. Chairman, Dr. Harold Lindley, 206 S. Oak St., Pecos.

New Mexico Medical Society, Annual Meeting, Western Skies Hotel, Albuquerque, May 11-13, 1960.

Southwest Obstetrical and Gynecological Society, Annual Meeting, Las Vegas, Nev., Nov. 7-8, 1960.

Arizona Academy of General Practice, Psychiatric Seminar, State Hospital, Phoenix, Feb. 13-14, 1960. Approved for 14 hours Category I credit. Dr. James L. Grobe, chairman, 5630 N. 27th Ave., Phoenix.

The University of Texas Postgraduate School of Medicine, Postgraduate Course, Dermatology, Turner Home, 1301 Montana Avenue, El Paso, Feb. 14, 1960.

Fourteenth Annual Symposium on Fundamental Cancer Research, The University of Texas Postgraduate School of Medicine, M. D. Anderson Hospital and Tumor Institute, Houston, Feb. 25-27, 1960.

American College of Surgeons, Sectional Meeting, The Broadmoore Hotel, Colorado Springs, Mar. 21-23, 1960.

Southwestern Medical Association, 42nd Annual Meeting, Hotel Hilton, El Paso, Oct. 20-22, 1960.

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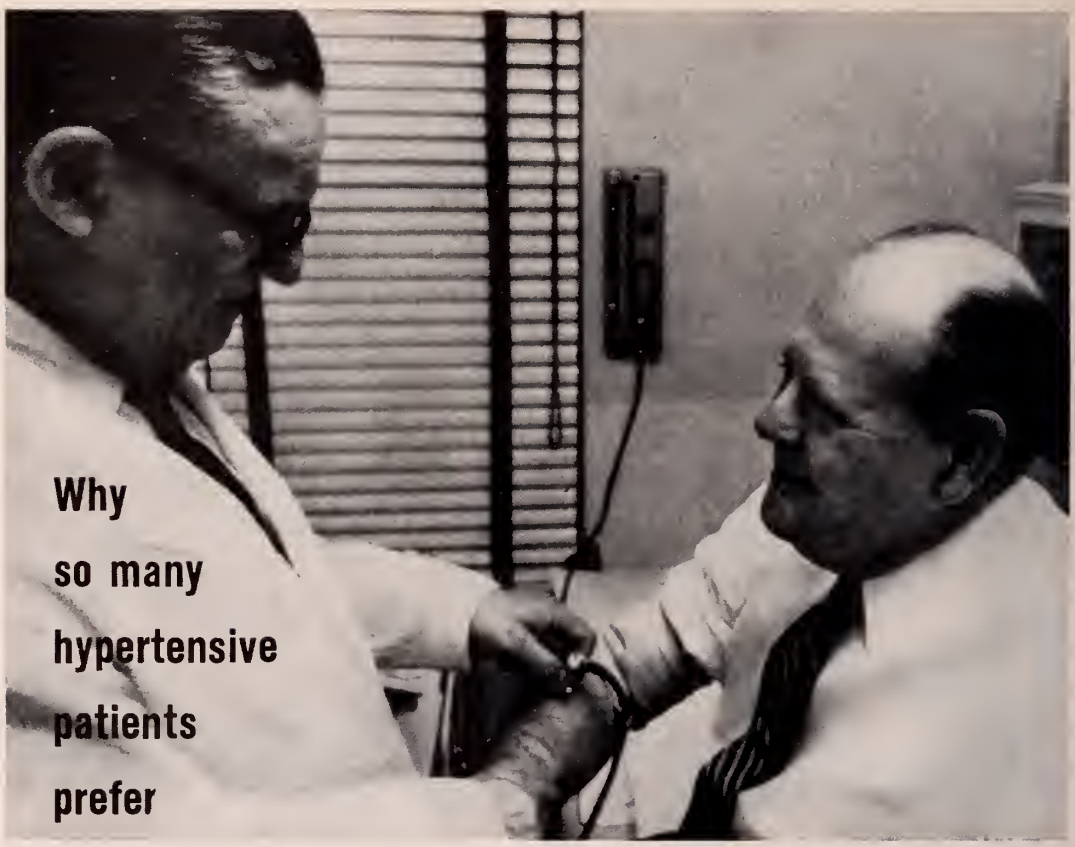
References: 1. Cronk, G.A.; Naumann, D.E., and Casson, K.: Antibiotics Annual 1957-1958, New York, Medical Encyclopedia Inc., 1958, p. 397. 2. Childs, A.J.: Brit. M.J. *1*:660 (Mar.) 1956. 3. Newcomer, V.D.; Wright, E.T., and Sternberg, T.H.: Antibiotics Annual 1954-1955, New York, Medical Encyclopedia Inc., 1955, p. 686. 4. Gimble, A.I.; Shea, J.G., and Katz, S.: Antibiotics Annual 1955-1956, New York, Medical Encyclopedia Inc., 1956, p. 676. 5. Stone, M.L., and Mersheimer, W.L.: Antibiotics Annual 1955-1956, New York, Medical Encyclopedia Inc., 1956, p. 862. 6. Campbell, E.A.; Prigot, A., and Dorsey, G.M.: Antibiotic Med. & Clin. Ther. *4*:817 (Dec.) 1957.

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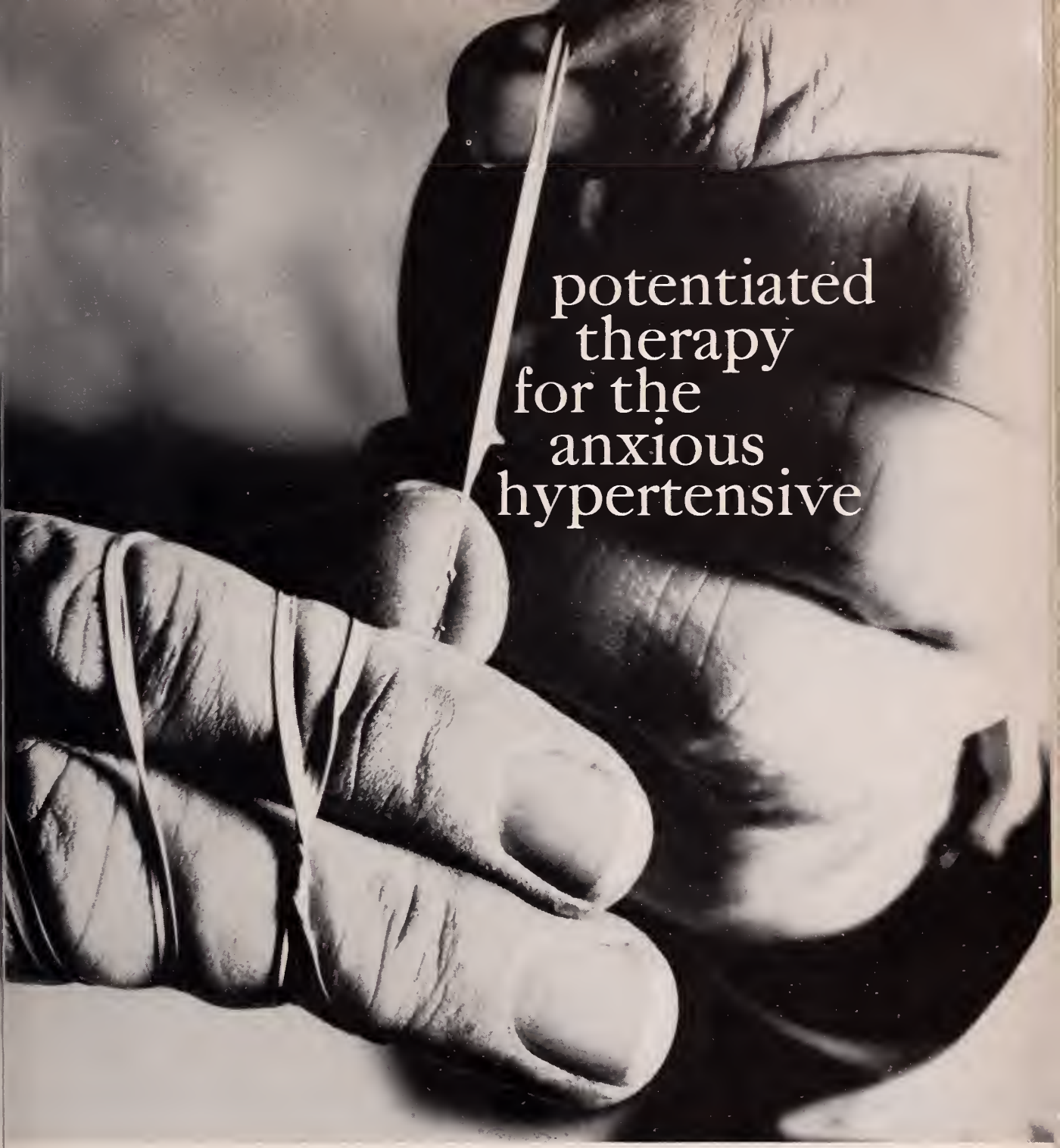
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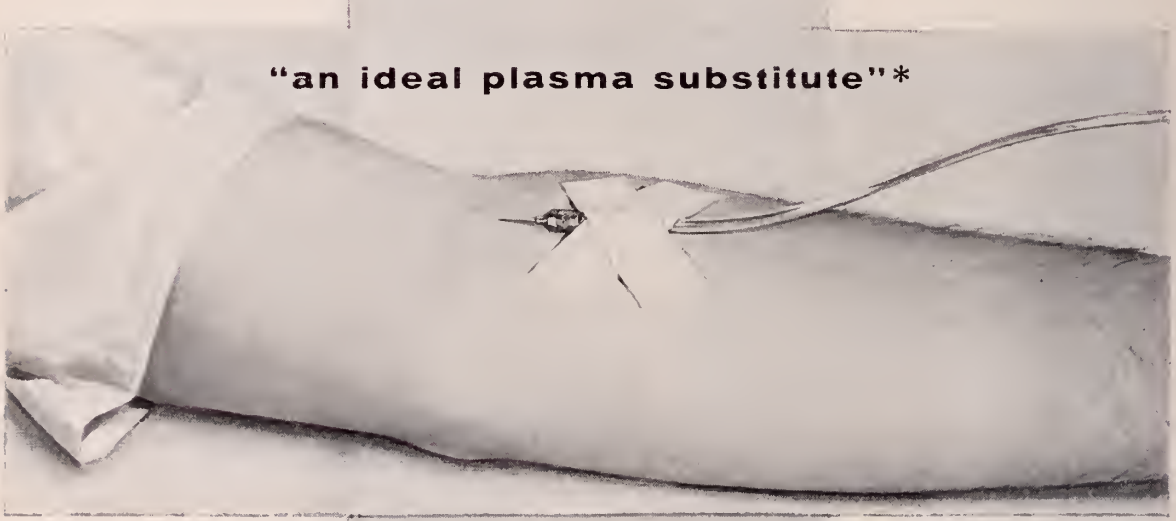
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*Cock, T. C., *et al.:* California Med. *89*:257, 1958.

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SOUTHWESTERN MEDICINE

VOL. XLI, NO. 1 JANUARY, 1960

THE PRESIDENT'S PAGE

Health Insurance

By Russell L. Deter, M.D., *El Paso*

President, Southwestern Medical Association

I wish to discuss today the rather broad subject of health insurance. The problem of prepayment medical care is much more complicated than Sears, Roebuck installment buying. It involves the doctors, hospitals, insurance companies, labor, management, purchasers of medical care and many nebulous intangibles, such as how much care do you want? What kind of care do you want? How do you know how much or what kind of care you should have? How much can you afford to pay for these services? Should you pay for any. If not, who should!? How much of a free ride do you want, or think you should have in medical care, as well as in everything else? Why is it the inalienable right of every individual to have good medical care. Why not good food, good cars, good clothes. These too are, or may be, important to good health? What is the purpose of health insurance?

In my opinion the purpose of health insurance should be to protect against large economic loss, rather than to provide for minor day to day costs. You do not carry insurance to finance minor repairs to your home, whereas you do carry insurance to take care of large losses to your home. The same may be said for your automobile. Health insurance should be to protect us from a loss which would interfere with our normal standard of living. What you pay for this protection will depend entirely on the number of people covered by your policy, the type of coverage that you carry and how much you abuse your insurance.

Many Factors

There are many things which increase the cost of health insurance. Over utilization is a prime factor in increasing this cost, and I wish to emphasize the "over" part of this word. You buy insurance to utilize it, but not to abuse it. Patients abuse health insurance mainly because they think they are getting something for nothing, whether they need it or not. The same man would not burn down his house because his fire insurance was paid up, nor would he commit suicide because his life insurance was paid up. We must all become impressed with the basic immorality of the idea of getting something for nothing.

There are three extremely important questions which the medical profession must answer for themselves and these are:

1. Are we willing to accept the proposition

that voluntary health insurance is the mechanism for solving the financial problems of medical care?

2. Are we willing to assume the leadership in solving the financial and social economic problems of medicine?

3. If not, are we willing to accept the leadership of a third party—a non-medical group?

What is it that is happening in health insurance fields which is disturbing us so much? First there is the abuse of health insurance by doctors, patients and hospitals. Many people have lost sight of the primary purpose of health insurance.

In addition to over-utilization, a patient will pressure a doctor into admitting him to a hospital for a diagnostic problem which could be handled just as well as an out-patient or office patient. Much of the responsibility for this lies in the type of policy which insurance companies are writing. The Texas Medical Association Health Insurance Committee meets three times a year with representatives of Blue Cross-Blue Shield and the Health Insurance Council of Texas in an effort to iron out some of these problems. Many changes have been made in insurance policies due to the transmission of ideas between our groups. One of the big changes is that many procedures are being paid for out of the hospital; whereas, previously, the patient would have had to be admitted to hospital for the care. Patients must be educated to realize that the abuse of unnecessary hospitalization will eventually put health insurance out of the reach of most people.

Falsified Records

Some doctors are aggravating this problem by going along with the request of patients, not only those abuses just listed, but in a few known instances actually falsifying records to get patients under policy deadlines. There are many areas in which doctors actually compound these abuses, a few intentionally, but the vast majority unintentionally, by using such tactics as dragnet diagnosis and shot-gun treatment. It is certainly the prerogative of each physician in charge of a case to do that which, in his opinion, is best for his patient; and the preceding and following statements are made only as a caution to all physicians, whether the patient has health insurance or not. A doctor may be lax on a continuation order for expensive drugs, or indiscriminate use of expensive antibiotics or prophylaxis prior to surgery, or every time a patient has a minimal fever. Even nurses compound this by calling the doctor's attention to a patient with a temperature of 106 degrees who is not on any antibiotics.

More serious, but less frequent, is the deliberate effort to get everything possible out of health insurance. One specific instance has been cited by a Texas writer of hospital and medical service plans. A doctor sent a bill for three cystoscopies he had never done. When faced by the patient, his answer was, "Your insurance pays for three cystoscopies, but not for other office procedures, so I just put in for these to get your entire bill paid!" In connection with this, insurance companies do not pay for diagnostic cystoscopies, but do pay only when a specific diagnosis is made. This, in itself, is poor business, because insurance companies must realize that a diagnostic cystoscopy is an important procedure in eliminating some other disease.

Padded Bills

Hospitals are certainly not above reproach. Some hospitals have been known to accept patients' policies as full payment for hospitalization, then pad the bill outrageously. After the patient has been in the hospital for four days they bill the insurance company for 12 day's stay. Some hospitals increase the room rates for those patients with health insurance. In my opinion this is absolute dishonesty!

A single large carrier writing hospitalization coverage for medical services last year recovered approximately $140,000.00 from doctors and hospitals in Texas. A large portion of this is represented by fraudulent fees and hospital bills.

Let us think carefully about these questions:

1. What can be done about unneccessary medical costs on insured patients in particular, and on all patients in general?

2. How should we discipline flagrant abuses of health insurance?

3. What else, if anything, can be done about the high cost of medical care? Active answers now can change the course of medicine.

I urgently solicit your suggestions, ideas, comments or criticisms.

Warning To American Physicians

PART II

By Jacobus H. Verhave, M.D., *Portales, N. M.*
Practicing Physician in Amsterdam, The Netherlands, 1925 to 1948

Additional Information on Disguised Socialized Medicine in the Netherlands

What would happen in this country should a small group of the population be given socialized medicine, was revealed in my first article by the successive events in the Netherlands.

As pointed out, the final result was that 95 per cent of the population of the Netherlands was compelled to accept socialized medicine, by its gradual expansion to almost all groups. Each individual covered by this disguised socialized medicine system does not only obtain the right of unlimited house and office calls, but shall get all drugs, of an arbitrarily composed list, without charge. In a check-up of several drug stores I was told that between 20 and 25 per cent of all free of charge prescriptions were never called for by the patient. This does not only demonstrate the waste of money, but also the lack of appreciation of the rendered service.

Tremendous Task

The Royal Dutch Medical Association, of which almost all physicians in the Netherlands are members, not only is required to defend the standards of medical care of the population, but also must protect the professional and financial interests of its members. It is impossible for this association to perform all of this tremendous task, without delegating some of its power. Therefore, holding the essentially medical and scientific matters within its own supervision, the Board created three sub-organizations, i.e. The Country's General Practitioners Society, The Country's Specialists Society and, The Country's Society of Physicians in Government Service, to which the parent organization delegated its power to defend the interests of its members.

Independently, however, the Government appointed a "Council for Medical Insurance," (in actuality a euphemism for the execution of socialized medicine), giving it the power to determine the fees which should be paid to the general practitioner and the specialist. The majority of this council are *not* medical people. Only a few are physicians.

Medical Unions

The continuous decline of the buying power of the guilder compels the aforementioned sub-organizations to meet with the Council of Medical Insurance, before a current contract expires, to bargain for any additional pay raise, to cover the cost of rising expenses.

Whereas the laborer's wages and pensions are automatically compensated by a pay raise, as soon as the cost of living increases, this does not apply to those contracts made with the Council of Medical Insurance, before the agreed expiration date. Thus, the medical sub-organizations of the Royal Dutch Medical Association are in reality no more than medical unions at a bargaining table, trying to persuade the Government Council to agree to a pay raise. Just like the labor-unions, no physician is permitted to participate in the vast medical-insurance contract programs if he is not a member of one of the sub-organizations.

Because the Council's majority is of the opinion that the physicians have a better income than the average intellectual, the Council is always reluctant to agree to a reasonable increase, such as given to the other "workers." The Council requires detailed information of the physicians expenses, before it is willing to allow any increase of the fee.

Successful Physicians Punished

A recent contract agreement, which will be effective Jan. 1, 1960, stipulates that the pay raise will be 12 per cent. The yearly fee for each of the first 2000 patients of a general practitioner will

then be $3.15, and for each successive patient only $2.30.

The present Dutch government is not socialistic, as were all previous post-war governments. Experience in England has shown, like nowadays in the Netherlands, that whenever clearcut or disguised socialized medicine has been established, no successive Government, for political reasons, is willing to make any changes, despite the obvious lower standards of medical treatment.

It is interesting to note, that the number of medical students enrolled at the University of Amsterdam since 1950 has declined 50 per cent (1958). This decline has occurred in spite of the considerable increase in population. As far as private medicine in this country is concerned, "the hand-writing on the wall" is apparent.

Socialized Medicine A One-Way Road, With No Point of Return

The United States Chamber of Commerce warned business men that passage of the so-called Forand measure "*would be a major breakthrough into the Welfare State.*" The Chamber said: "there will be a powerful attempt made to enact the measure next year. If successful it probably would lead to a compulsory federal program providing complete medical care for everyone."

"*Once a program of this kind got started, there would be no stopping it.*"

What does the "Welfare State" mean?

The Welfare State is the State which makes the personal responsibility of the citizen subservient to the responsibility of the Government. According to this philosophy the Government has to care for its citizens like a mother does for her children. This care finds expression in a striving for Social Security not (like in former days) for the less privileged, but for the entire population. On the face of it, it seems rather friendly, however, the consequences are grim.

Because the Government is responsible for everybody's well-being, it should have at its command the power and the right of say to bear this responsibility. The impersonal Robot or Welfare State will think for you, will act for you, will punish you, and if you don't obey, will muzzle you. Therefore, the Welfare State degrades all the population to the status of minor children. This is not compatible with individual freedom and destroys the sense of responsibility of the citizen.

Profession Divided

Unfortunately the medical profession today is divided. There are some of us, ostrich-like, knowing these dangers, pretending they don't exist. There are the selfish, with their philosophy of "après moi le déluge," thinking that the inundation will always leave a dry spot just for their escape. There are the left-wingers, thinking that democracy means the biggest class has to rule the minor (or intellectual) class. There are the uncritical, passively accepting any new trend, without realizing the evil results. There are those supporters of the compromise and the cooperation, thinking that giving one finger will not mean the loss of the whole body.

This situation must be changed by the alertness and moral determination of the great majority of physicians.

Let us not be complacent and think that we can wait until the flood has come and then resist it with one finger in the dyke. Let us continue to honor our oath, and to serve our patients with honest practice, avoiding overcharge to the less wealthy, but insisting that freedom, in the American sense, applies to all classes, not only to the laborer.

Let us be aware that people prefer to spend their income themselves, rather than have the state spend it for them.

Let us not be fooled by a never proven slogan that communism or its twin sister socialism will conquer the world. Recent elections in England and the Netherlands have proved the opposite.

Again, as a witness of socialized medicine in the Netherlands, I feel it my duty to warn the American physician to stand firm and fight with a convinced mind any measure that will lead to the compromise of our present high level of medical care.

Let us not accept the authority of agencies or schemes, like the relative value scale, to pave the way for eventual enslavement of the medical profession.

Let us be prepared and close our ranks for the coming battle. Let us form a solid medical front, including dentists and pharmacists, confident that no government can compel us to participate in Socialized Medicine. No agency can break the power of a united medical profession, because only a physician can practice medicine.

FORENSIC MEDICINE

Problems Encountered In Autopsies

By Frederick P. Bornstein, M.D., *El Paso*

EDITORIAL COMMENT

For some time your editors have been interested in starting this column and have talked with its author on numerous occasions. Pathology is one of the most basic sciences of medicine and its value cannot be overestimated. The author of this column, Dr. Frederick P. Bornstein, is a very able pathological anatomist with a flare for forensic medicine coupled with insight into human nature and a good wit.

The column will not be with us every month but will be published from time to time. Some of the articles will be purely practical such as this first one, some of them will have an air of mystery about them with the answer in the last part of the article, and all of them will be whatever the author wants to make them.

While making an editorial comment, your editors would like to call the reader's attention to our interest in obtaining contributions involving cases for the column and to reiterate our desire for all types of scientific material.

—L.W.B.

The special problems encountered in a forensic autopsy pose a number of questions, not only of legal but also of medical interest. If a patient dies in the hospital with certain symptoms and if then we encounter certain lesions, we are perfectly willing to correlate the lesions with the symptoms and blithely call this "cause of death".

Even in a perfectly innocent appearing coroner's case we are often handicapped by the fact that no history is available, and under such circumstances one relies on the pathological experience gained from other autopsies with good clinical documentation to assign similar lesions as cause of death. The borderline here is an extremely slender one and the next two cases are given to illuminate the problem of determining cause of death from anatomical lesions.

Case No. One was an elderly gentleman. On autopsy there was a marked cardiac hypertrophy with an extreme aortic stenosis and extreme myocardial scarring. This itself is a lesion which any pathologist would encounter frequently in hospital practice and would have no hestitation in signing out as aortic stenosis, especially if the record reveals a classical symptomatology and treatment for heart disease. However, this man was killed in an automobile accident and the anatomical findings in the heart are purely incidental to the cause of death.

Elderly Man

Case No. Two was an elderly man whose history given was that he had been sick for 10 years, that he had been short of breath and was dead on arrival. This man had extremely severe coronary sclerosis, patchy scarring in the myocardium, no obvious fresh infarcts, and a thrombus in the left main descending branch. Such findings seen in a hospital case again will not produce any hestitation on the part of the pathologist in signing out such a disease as coronary sclerosis and considering this the cause of death. However, in addition to the findings mentioned, this man had a perforated peptic ulcer and an acute, severe peritonitis.

These two cases show clearly that in our present state of knowledge certain anatomical findings in the heart, even in far advanced cases, may either represent changes which produce death or may represent changes compatible with life and only incidental to some other fatal disease. This state of affair forces the forensic pathologist, in absence of any reliable history, to do rather complete autopsies, very often to the irritation of the undertakers and the family. Often in so-called obvious conditions, toxicology will be necessary and there will be delay in the signing of the death certificate. Thus, with what assurance can investigating authorities decide that a death was obviously due to natural causes even without performing an autopsy? Experience with such cases also forces the forensic pathologist, if asked "Is this autopsy necessary?" to the answer which is always the same, "Yes and always yes".

MEETINGS

TMA President To Speak At District One Meeting

Dr. Franklin W. Yeager, Corpus Christi, president of the Texas Medical Association, will be the principal speaker at the annual meeting of District One of the Texas Medical Association in Pecos, Texas, Feb. 5.

Officers of District One are Dr. W. E. Lockhart, Alpine, president; Dr. W. H. McClure, Kermit, vice-president; and Dr. Gordon L. Black, El Paso, secretary-treasurer.

The complete program follows:

9:00- 9:30	Registration.
9:30-10:00	Adrenogenital Snydrome Ira A. Budwig, M.D., El Paso
10:00-10:30	Development of Open Heart Surgical Program In a Community Hospital and Indications for Special Cardiac Studies E. Samuel Crossett, M.D., El Paso John M. Verosky, M.D., El Paso
10:30-10:45	*Intermission.*
10:45-11:15	Surgical Treatment of Deafness C. M. Stanfill, M.D., El Paso
11:15-11:45	New Hemopoietic Hormone Jack C. Postlewaite, M.D., El Paso
11:45-12:15	Recent Developments in Virology of the Central Nervous System Nathan M. Kleban, M.D., El Paso
12:15- 2:00	Luncheon Speaker: Franklin W. Yeager, M.D., President, Texas Medical Association.
2:00- 2:30	Some Rare Lesions Seen by the Proctologist William G. Smith, M.D., El Paso
2:30- 3:00	Practical Approach to Asthma Albert H. Unger, M.D., El Paso
3:00- 3:15	*Intermission*
3:15- 3:45	Current Concepts in Fracture Management Louis W. Breck, M.D., El Paso
3:45- 4:15	Cysticercosis of the Central Nervous System in West Texas Frederick P. Bornstein, M.D., El Paso.

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Cardiac Symposium

Scheduled In Phoenix

The Arizona Heart Association will hold its third annual Cardiac Symposium Jan. 29-30 in the Arizona Biltmore Hotel in Phoenix. The program follows:

Friday, Jan. 29

8:00- 9:00	Registration — Lobby Entrance.
9:00	Greeting by Dr. Donald K. Buffmire, Phoenix, President, Arizona Heart Assn.
9:15-10:15	Possible Clinical Applications in Spatial Vectorcardiography Dr. George E. Burch, New Orleans.
10:15-10:30	Intermission — Visit Exhibits.
10:30-11:30	The Surgical Treatment of Acquired Valvular Heart Disease Dr. John W. Kirklin, Rochester, Minn.
11:30-12:30	Present Day Management of Hypertension Dr. Robert W. Wilkins, Boston.
12:30- 2:00	Luncheon.
2.00- 3:00	Management of Congestive Heart Failure Dr. George E. Burch, New Orleans.
3:00- 4:00	The Modern Treatment of Cerebrovascular Diseases Dr. Irving S. Wright, New York.
4:00- 4:15	Intermission.
4:15- 5:00	Panel Discussion of Current Cardiovascular Problems Dr. Robert H. Bullington, Phoenix, Moderator.

Saturday, Jan. 30

8:00- 9:00	Registration — Lobby.
9:30	Greeting by Dr. William A. Butcher, Tucson, President-Elect, Arizona Heart Assn.
9:45-10:45	Present Status of Surgical Treatment of Tetralogy of Fallot Dr. John W. Kirklin, Rochester, Minn.
10:45-11:00	Intermission.
11:15-12:15	Anticholesterolemic Agents and Atherosclerosis Dr. Robert W. Wilkins, Boston.
12:15- 2:00	Luncheon.
2:00- 3:00	Progress and Problems in Anticoagulant Therapy Dr. Irving S. Wright, New York.
3:00- 4:00	Panel Discussion of Current Cardiovascular Problems Dr. Donald K. Buffmire, Phoenix, Moderator. Note: All speakers will participate in Panel Discussions.

Ladies Activities

Friday, Jan. 29

11:00	"Ice-Breaker" Coffee — Lobby.
12:30	Poolside Luncheon Fashion Show, Arizona Biltmore Hotel
7:00- 8:00	Cocktail Party — Semi-Formal Arizona Biltmore Hotel.
8:00	Dinner - Dancing.

Saturday, Jan. 30

10:00 Please state your preference on registration form for the following activities.

Golf, Tennis, Swimming — At the Arizona Biltmore

Trip to Scottsdale, Sight-seeing, Shopping, On-your-own — Transportation furnished by Women's Committee

TMA Conference January 16 Features SWMA President

The Texas Medical Association will hold its annual winter meeting on January 16, 1960, at the headquarters building in Austin. The meeting is the Conference of County Medical Society Officials.

Although the program is aimed toward county medical society presidents, secretaries, executive secretaries, delegates and legislative chairmen, all members of the Association are invited to attend the one-day conference. This meeting attracts close to 500 physicians and guests each year.

New and transfer members of the Association will have an opportunity to attend an orientation program which will be held in conjunction with the conference and most of the TMA councils and committees will also meet during the weekend in Austin.

The feature attraction of the informative conference will be five prominent guest speakers. These are: Honorable Bruce Alger of Dallas, member, U. S. House of Representatives; Mr. John McKee of Dallas, Southwestern Director of Civic and Governmental Affairs, Ford Motor Company; Mr. Allan B. Kline of Western Springs, Illinois, Farm Bureau leader and statesman; Dr. Marvin Vance of Austin, pastor, First Methodist Church; and Mr. F. Joseph Donohue of Washington, D. C., chairman, Board of Directors, American Thrift Assembly.

Dr. Deter On Panel

Highlighting the afternoon will be a panel session on "Achieving Greater Understanding of Health Care Costs," to be moderated by Russell L. Deter, M. D., of El Paso, chairman, Texas Medical Association's Committee on Health Insurance and President of the Southwestern Medical Association. Panelists will include: Dr. Arthur Kemp of Chicago, Director of the Department of Medical Economics Research, American Medical Association; Mr. G. Frederick Roll of Philadelphia, Director of Public Relations, Smith Kline & French Laboratories; and Mr. William Earngey of Fort Worth, Immediate Past President, Texas Hospital Association.

The topic of Congressman Alger's talk will be "Medical Issues Pending Before Congress." Dr. Vance will present "Medical Leadership in the Community," and Mr. Kline will duscuss "The American Way of Life." Mr. Donohue will speak on "Tax Considerations and the Physician." and Mr. McKee will round out the program with his presentation, "The Action Approach."

For the convenience of those attending the conference, luncheon will be served in the basement of the headquarters building. The traditional hospitality hour will conclude the conference Saturday evening in the Crystal Ballroom of the Driskill Hotel.

N. M. Police Now Equipped To Handle Poison Victims

New Mexico State Police are being equipped to handle poison victims, accidental or otherwise.

Each of the 160 state police cars is being given a poison control kit.

The poison control kit project was worked out by the N. M. Medical Society in conjunction with the N. M. Dept. of Public Health, which provided funds for the project.

The kits will supplement operation of eight poison control centers in Albuquerque, Las Cruces, Silver City, Alamogordo, Carlsbad, Roswell, Clovis and Raton. The centers were established by the N. M. Dept. of Public Health and are operated under supervision of county medical societies.

The kits, to be placed with first aid kits in state police cars, consist of plastic bags and contain a universal antidote. Each has a list of instructions with "do's and don'ts."

Immediate Antidote

The antidote can be given immediately by the state police in an emergency and acts as an absorber and neutralizer of the poison until the patient reaches a hospital or medical care.

The poison control centers in the respective cities are available to provide data on what treatment should be given for the particular poison that has been swallowed.

The poison control kit program extends the overall plan by equipping the state police to provide immediate treatment for poison victims in outlying and rural areas as well as in metropolitan centers.

Dr. von Briesen Elected President Of El Paso County Medical Society



Dr. von Briesen

Dr. Delphin von Briesen was elected President of the El Paso County Medical Society December 8 at the organization's annual meeting. He will serve for the 1959-60 year.

Other new officers are Dr. Louis W. Breck, President-Elect; Dr. Jesson L. Stowe, Vice-President; Dr. O. G. Zacharias, treasurer; Dr. Bradford Hardie, Secretary; and Dr. E. S. Crossett, Secretary-Elect.

Dr. Branch Craige is the retiring President.

Born in Clifton, Va., Dr. von Briesen has been a resident of El Paso since 1910, is a graduate of El Paso High School and attended Texas College of Mines and Metallurgy from 1927 to 1929 for pre-medical studies. He received his M.D. from the Texas University Medical College in Galveston.

He interned and took his resident training at the State University of Iowa between 1933 and 1935. He began the practice of medicine in El Paso in 1935. During World War II Dr. von Briesen served with the U. S. Navy between May 1, 1941 and November, 1945 in various U. S. stations and Alaska and emerged from the service with the rank of commander.

Resumes Practice

Dr. von Briesen resumed his practice in El Paso in 1946 and is associated with Dr. George Turner at the El Paso Medical Center at 1501 Arizona Ave.

He is President-Elect of the Texas Radiological Society and will take office at the start of 1960. He is certified in radiology by the American Board of Radiology, is a Fellow in the American College of Radiology, is a member of the American Roentgen Ray Society, Texas Radiological Society, Radiological Society of North America, Rocky Mountain Radiological Society and Southwestern Radiological Society.

He and his wife, the former Mary Emma Luckett of El Paso, reside at 3020 Wheeling Ave. in El Paso and have three children, Delphin Jr., 12, Suzanne, 10, and Gates, 7. Dr. von Briesen's hobbies are bird hunting and music. He was employed as a news reporter on the old El Paso Post from 1923 to 1927 under the editors, Tom Sharp and Wallace Perry.



Dr. Deter

Dr. Deter Of El Paso Elected President Of Southwestern Medical Association

Dr. Russell L. Deter of El Paso was elected President of the Southwestern Medical Association at its 41st annual meeting in Roswell, New Mexico, November 5-7. The meeting featured Pediatric Medicine and Surgery and was arranged by the Association in conjunction with the Chaves County Medical Society and the New Mexico Chapter of the American Academy of General Practice.

Other new officers are Dr. H. D. Cogswell, Tucson, President-Elect; Dr. Bryan Monahan, Santa Fe, Vice-President; and Dr. Merle D. Thomas, El Paso, Secretary-Treasurer, who was reelected for another year.

The 1960 meeting will be held Oct. 20-22 in Hotel Hilton, El Paso.

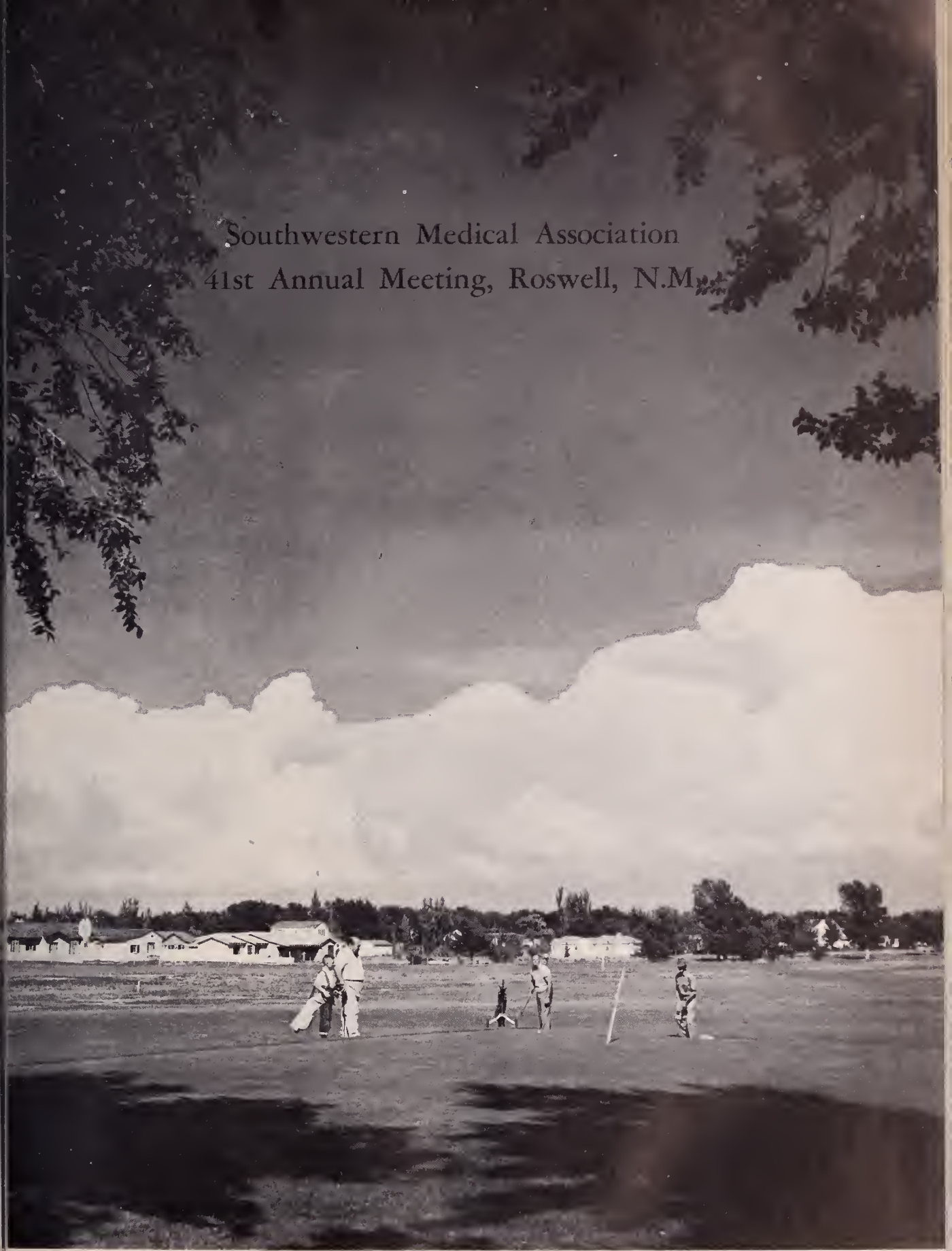
Members of the Executive Committee for the 1959-60 year are Dr. A. R. Clauser, Albuquerque, immediate Past President; Dr. Robert F. Boverie, El Paso; Dr. Louis G. Jekel, Phoenix; Dr. Emmit M. Jennings, Roswell, who was general chairman for the Roswell meeting; Dr. David Rusek, Chihuahua City, Mexico; Dr. Carlos Tapia, Hermosillo, Sonora, Mexico; and Dr. Louis W. Breck, El Paso, Managing Editor of SOUTHWESTERN MEDICINE.

Held in conjunction with the Southwestern meeting were sessions of the New Mexico Medical Society's Council and House of Delegates.

Dr. Deter was born in Sao Paulo, Brazil, where his parents were Baptist missionaries. He received his M.D. from Baylor University College of Medicine and he then interned at Parkland Hospital in Dallas. He began six years of active duty with the Army Medical Corps in late 1940 and emerged from the service with the rank of Colonel after duty that included a year on an Army hospital ship in the Pacific and European Theaters of War. He began the private practice of medicine as a surgeon in El Paso in 1946, and is associated there with Drs. Harry H. Varner and Leigh E. Wilcox.

Dr. Deter is chairman of the Texas Medical Association's committee on health insurance; chairman of the El Paso County Medical Society's Hospital Committee; chairman of the El Paso Public School's athletic injury committee; a member of the Board of Managers of the El Paso Hospital District and chairman of its building committee; and is a Delegate to the TMA. He has served as Secretary-Treasurer of the Southwestern Medical Association for three years and is a past Secretary-Treasurer of the El Paso County Medical Society. He is a member of the First Baptist Church.

He and Mrs. Deter, who is President of the El Paso County Medical Society's Auxiliary, reside at 4428 Hastings Street in El Paso. They have a son, Russell L., Jr., who is a sophomore at the Baylor College of Medicine; a daughter, Doris, who is a dietetic interne in the Veterans Administration Hospital in Houston; a daughter, Phyllis, 10; and a son, Dwight, eight.



This is one of the three beautiful golf courses in Roswell, N. M., which were available to physicians and their wives at the recent 41st annual meeting of the Southwestern Medical Association, Nov. 5-7. Roswell is famous for its Goddard Rocket Museum, Bottomless Lakes State Park, and the 1610-foot television tower, the world's tallest man made structure. (Photo courtesy Roswell Chamber of Commerce).



Dr. Frederick R. Guilford, Houston, left, one of the speakers; and Dr. George C. Anison, Albuquerque.



Dr. Dan G. McNamara, Houston, left, a speaker; and Dr. Karl Bergener, Roswell.



Dr. George Morrison, Roswell, left, and Dr. Jack S. Guyton, Detroit, a guest speaker.



Dr. William Blank, Albuquerque, left, and Dr. herwood Burr, Tucson.



Dr. J. E. Hogan, Big Spring, Tex., left, and . F. M. Diele, Holyoke, Colo.



Dr. Robert Spensley, Albuquerque, left, and r. Daniel T. Cloud, Phoenix.



Dr. Albert H. Follingstad, Albuquerque, chairman of the New Mexico Medical Society's Public Relations Committee; Mrs. G. D. Grady and (standing) Dr. Grady, Albuquerque.



Dr. and Mrs. J. J. Young of El Paso.

Left to right, Mrs. Sarah Gaston, RN, Roswell; Sister Regina, Sister M. Cordula, and Sister Mary Roswitha, all of St. Mary's Hospital, Roswell.





Dr. T. J. Glenn, Farwell, Tex., left, and Dr. E. D. Fikany, Ft. Sumner, N.M.



Mrs. Dan G. McNamara, Houston, left, wife of a guest speaker, and Mrs. Robert R. Boice, Roswell, at the cocktail party given by Southwestern Surgical Supply.



Dr. J. W. Cortner, Tucson, left, and Dr. E. W. Lander, Roswell.



Also at the Southwestern Surgical Supply cocktail party were, Mrs. Frederick R. Guilford, Houston, left, wife of one of the guest speakers, Mrs. Russell L. Deter, El Paso, wife of the Association's new president and also president of the El Paso County Medical Society's auxiliary, and Mrs. George S. Richardson, Roswell.



Dr. C. E. Montgomery, left, and Dr. Clark, both of Roswell.

ORIGINAL ARTICLES

Primary Bone Grafting Of Fractures Of The Forearm In Adults*

By Louis J. Levy, M.D., *Fort Worth*

In spite of unhappy experience and adverse publicity, there is still a strong temptation for many of us to treat fractures of the mid and upper forearm in the adult by closed reduction. We know, however, that even in expert hands closed reductions are often fraught with disaster. Open reductions with pins and plates, even by the most competent workers, show a high incidence of non-union and other complications. Work of less competence yields, in addition to non-union, linear and rotary mal-alignment, abnormal approximation of radius and ulna, deformity and discomfort associated with angulation, limitation of motion, and other complications in an alarming percentage.

In an excellent analysis in 1949, Knight and Purvis (1) found 71 per cent unsatisfactory results following treatment by closed manipulation and casts. The healing time averaged 4½ to five months, with 12 per cent non-unions occurring. Open reduction, without rigid internal fixation, yielded 85 per cent unsatisfactory results. There was considerably higher incidence of satisfactory results with plate or intramedullary pin fixation, but the healing time was no better than with closed manipulative methods. Smith and Sage (2) reported similar observations following intramedullary pinning of forearm fractures. These and other articles, along with the sad experience of all who deal with these fractures, emphasize the necessity of having a variety of techniques available to deal with such a treacherous opponent.

Bone Grafting

A number of years ago, in an effort to improve these unhappy statistics (and patients), bone grafting of fresh fractures of the mid or upper third of the radius and ulna was started. At first this was accomplished with the addition of rigid fixation, either external skeletal methods, or with internal fixation by plate or intramedullary pins, plus the addition of bank or tibial bone. Tibial bone was soon discontinued in favor of iliac crest bone, because the cancellous bone obtained from the latter afforded rapid healing and avoided the frequent and embarrassing complication of fractured tibias. Bone from the iliac crest has its disadvantages, however, when used as a bone plate.

A piece that has sufficient thickness to render stability to the fracture site has so much bulk that the wound may be difficult to close. This is particularly noticeable when applied to both bones. Iliac crest bone is therefore usually utilized as thin cancellous onlay grafts, to stimulate osteogenesis, when other skeletal fixation methods are used for rigid support. Bank bone in the early stages was neither readily available nor absolutely dependable as to sterility, and was therefore used only when absolutely necessary.

Additional Surgery

The use of donor bone grafts obtained from the iliac crest or tibia necessitates additional surgery, and also additional pain and disabling incisions. In an effort to avoid this, a technique was gradually devised whereby local forearm bone could be used. By making a fairly long incision along the subcutaneous border of the ulna, a long segment of the ulna can be easily exposed proximal and distal to the fracture site. By using the circular and oscillating saw, the ulna can be bisected longitudinally for two or three inches proximal and distal to the fracture site. One portion is used as a sliding graft to fix the ulnar fracture site, while the other is used as an onlay graft for the radius. (Fig. 1.)

*Presented at the Texas Orthopedic Society meeting, San Antonio, April 20, 1959.



Figure 1-A



Figure 1-B

Illustration of sliding inlay-onlay graft technique, as performed on dried specimen of radius and ulna.

Each bone plate thus used is attached to the radial and ulnar fragments with screws so that it furnishes not only rigid fixation, but also the necessary additional local bone to encourage healing. This procedure was found to be quite satisfactory in many cases, since it afforded a number of advantages: The use of autogenous bone is always an advantage over bank bone, and here the use of additional incisions for donor bone is obviated. The bone plates thus obtained furnish adequate fixation with only the occasional addition of a metal plate. By avoiding unnecessary bulk, this has the decided advantage of allowing closure of the wound with less tension, and resulting in materially less post-operative swelling and pain.

It avoids the discomfort and increased morbidity encountered when using the iliac crest as the donor site. This procedure cannot be used very well in segmental fractures, or in fractures with extensive comminution at the fracture site, but can readily be used if only minor local comminution is present. For segmental fractures, skeletal fixation (usually intramedullary pins) with primary iliac crest strips or bank bone grafting, is necessary. In exposing these fractures, care must be taken to avoid stripping of all blood supply from the middle segments.

Inlay-Onlay Technique

The inlay-onlay technique as described also works very well in the treatment of delayed or non-union of the ulna, or of radius and ulna. Of course, in treatment of fresh or old fractures, it is necessary that the fragments be held in proper longitudinal and rotary alignment so as to prevent undue stress, angulation, and non-union. The correction of rotary malposition particularly must be stressed, since this error results in a high percentage of limitation of supination or pronation.

The use of the inlay-onlay method requires careful handling of the bones during the taking and applying of the graft, but with proper care no difficulty should be encountered. In all 20 cases where this method of treatment was decided upon prior to surgery, there was no incidence where it could not be satisfactorily employed during the surgical procedure. One objection that might be raised to the inlay-onlay graft technique is a possible weakening and secondary pathological fracture of the ulna at the unfilled donor site. Actually, this has not occurred because the defect in the ulna fills in rapidly. In 15 cases followed from several months to more than five years there was no case of pathological fracture due to the use of this technique.

Comment

At the present time, the orthopedic surgeon has at his command either the use of this inlay-onlay method, metal skeletal fixation with added iliac crest or bank bone, or fixation with bank bone plates. Any of these may be used primarily on forearm fractures and, when properly done, the percentage of satisfactory results on fresh fractures should approach 100 per cent. A most gratifying aspect is the reduction in average healing time from the usual 4½ to five months down

to an average of 12 weeks. This allows much more rapid mobilization and rehabilitation of the arm, and a reduction in total disability time by several months.

In this series, there were 31 private cases involving fixation and grafting of one or both bones of the forearm. Comparison between cases with skeletal fixation plus the use of autogenous or bank bone, and the cases in which the inlay-onlay technique was used, show reasonably similar results. The average healing time with the inlay-onlay technique was a little shorter, but as previously stated, in some of the more extensively comminuted cases this technique could not be used.

The use of a sliding graft in the treatment of non-union of the ulna was particularly gratifying and followed by an average healing time of 2½ months. In cases where we are dealing with a fracture of the radius, with an intact ulna, the ulna may be used as a donor site to supply an onlay bone graft for fixation of the fracture of the radius.

Summary

The essential elements in the treatment of fractures of the radius and ulna in adults is fixation in proper position, plus the addition of a bone graft across the fracture site. Closed reductions, or the use of open reductions without additional bone, has a high percentage of unsatisfactory results. The inlay-onlay grafting technique should be added to the armamentarium of the orthopedist, since its use may be helpful in many cases in obtaining satisfactory healing when bank bone is not available, or without the necessity of additional incisions elsewhere in the patient.

918 8th Avenue

Bibliography

Knight, Robert A., and Purvis, George D.: **Fractures of Both Bones of the Forearm in Adults.** Journal of Bone and Joint Surgery, 31: 755-764, October, 1949.

Smith, Hugh., and Sage, Fred P.: **Medullary Fixation of Forearm Fractures.** Journal of Bone and Joint Surgery, 39: 91-98, January, 1957.

The Back To Be Considered At Law-Medicine Institute

The Law-Medicine Center of Western Reserve University in Cleveland, Ohio, will offer a two-day institute on "The Back: A Law-Medicine Problem Reappraised."

A special feature of this institute, being held Feb. 12 and 13, will be two actual settlement negotiations in the Saturday afternoon session: one involving a whiplash case and the other a disc case.

The Friday and Saturday morning sessions will be devoted to defining the back and studying in depth the function of the back and the relationship of the back to the whole body as well as studying what trauma and disease affect the back and how they affect it. Rehabilitative procedures, diagnosis and evaluation techniques to determine disabilities will also be investigated.

The institute will be held in the Hatch Auditorium of the Newton D. Baker Building on the Western Reserve University campus from 9 a.m. to 4:30 p.m. each day. The fee for this institute is $25. Housing facilities will be available.

For registration or information contact Oliver Schroeder Jr., The Law-Medicine Center, Western Reserve University, Cleveland 6, Ohio.

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EL PASO, TEXAS

CPC

Clinical Pathological Conference

R. E. Thomason General Hospital, El Paso

October 15, 1959

Frederick P. Bornstein, M.D., *Editor* — *Case No. 1309*

Presentation of case by Jack Postlewaite, M.D.

History: Dr. Nathan Kleban:

A 41-year-old woman entered the hospital on July 17, 1959.

For one week she had been drinking heavily. Vomiting of blood began on the day before and continued until admission. No bowel movement had occurred for 24 hours since black, foul-smelling stools had been passed. The abdomen had become increasingly distended.

The only other history obtained from the patient was that she had been a heavy drinker all of her life.

Physical Examination:

The patient appeared intoxicated, reeked of alcohol, was stuporous and in shock. Blood pressure was not obtained. Pulse was 190, thready, regular. The skin was pale, cold, clammy. The left cheek was ecchymotic. Scaly, macuo-papular lesions were present on the legs. There was undernutrition. Respirations were rapid, shallow and equal. Conjunctivas were injected. A grade II systolic murmur heard over the precordium was loudest at the apex. No bowel sounds were heard over a distended, tender, tympanitic abdomen which had an intact, healed surgical scar between the umbilicus and symphysis pubis. Soft stool, color not described, was on the examining rectal glove. Pelvic examination was not done. Deep tendon reflexes were active, equal. There were no pathological reflexes.

Hospital Course:

Vomitus on admission consisted of bright and dark blood and brown granular material. Quantity was not recorded. Four units of whole blood were transfused. A sengstaken-Blakemore nasal esophageal-gastric tube was inserted and inflated to 30-50 M.m. of mercury pressure. Rectal temperature rose to 105. L-Arterenol (Levophed) maintained blood pressure at or above 100.

Meperidine (Demerol) was given for pain and phenobarbital for restlessness. In addition to the blood the patient received 250 c.c. of human albumin, 2000 c.c. of saline, and 5000 c.c. of 5% glucose/D.W. Urine output was 1700 c.c. There was 1300 c.c. obtained by the gastric suction, but the material was described only once as "app. coffee grounds". A small amount of brownish-green fecal material was returned after a saline enema.

The patient continued to have fever. Chlortetracycline (Aureomycin) was administered. Surgical intervention for mechanical intestinal obstruction was considered indicated but it was felt that she could not tolerate it. Irregularity of pulse was treated with digitalis. Blood pressure could not be maintained. Breathing became labored. Death occurred 48 hours after admission.

Laboratory:

Blood counts: 7-17-59—Hb. 14.7 gms., Ht. 49 vol. %, WBC 13,700, Stabs. 2, Segs. 80, Lymphs. 18. 7-17-59 — Hb. 16.0 gms., Ht. 48 vol. %. 7-18-59 — Hb. 18.2 gms., Ht. 61 vol. %.

Prothrombin time — 7-18-59 — 100%

Urinalyses: 7-17-59 — (Catheterized) Amber, cloudy, acid, S.G. 1.015, Albumin 1+, sugar neg., loaded with WBC, loaded with motile bacteria, heavy amorphous phosphate crystals.

Blood chemistry: 7-18-59 — Calcium — 3.6 mEq/L. CO_2 capacity — 30. mEq/L. Potassium — 3.7 mEq/L. Sodium — 127 mEq/L. Urea Nitrogen — 28.2 mg. %. 7-18-59 — Amylase — 117. Van den Bergh Direct — 1.46. Indirect 3.48.

X-rays: 7-17-59 — Flat and upright abdomen, P-a chest:

"Radiographic examination of the chest reveals the lungs to be well aerated. There is no evidence of active pulmonary infection or congestive failure. The heart and mediastinal structures appear natural. The bony thorax and diaphragm appear intact. The trachea and esophagus occupy their usual positions. Supine and upright radiographic examination of the abdomen reveal no evidence of free air.

"There is a marked small bowel distention due to a mechanical obstruction. The point of obstruction may be in the transverse colon. There is a soft tissue density in the bony pelvis consistent with an enlarged uterus or tumor. Conclusions: chest negative for evidence of an acute process or congestive failure. Mechanical bowel obstruction. Pelvic mass."

Clinical Discussion: Dr. Jack Postlewaite:

This history bears a lot of discussion. First, the red herrings. The first I noticed was bacilluria. I see no reason why a female, alcoholic, with a bacilluria and some trace of albumin could not have a pyelonephritis, a pyelitis, or possibly a cystitis. The urologists say a bacilluria is the sine qua non of actual renal pathology.

The next red herring, to my mind, is that the patient came in vomiting blood. Although she vomited blood she failed to lose blood; her admission hemoglobin, if anything, is somewhat polycythemic. Now in addition to vomiting blood and passing blood by rectum, the two observations made here, nurses' observation and intern's observation, indicate that there was no blood in the rectum.

There was a bile colored stool and there may have been blood in the intestines demonstrable on benzidine test studies. Blood was observed apparently in the oropharynx and therefore the benzidine test should have been positive. Another red herring: this patient has liver disease, having been an alcoholic all her life. Well, that may be, but this alcoholic was a well nourished individual at least in terms of getting some food. An interne noted that the patient was hyposthenic, and I presume this refers to the body build rather than the nutrition problem. There was a great deal to indicate that the woman, prior to this one week of alcoholism, did reasonably well.

Problem Arises

This brings up the following problem. Supposedly she was admitted with cirrhosis of the liver due to chronic alcoholism and bleeding from esophageal varices. Then a couple of liver tests including a prothrombin time, were done, and she is a patient with a prothrombin time of 100%. This means she has no liver disease. Her alcoholism has not interfered with her nutrition. She therefore has not a biliary cirrhosis. Now there is one thing that is remarkable about the various types of liver cirrhosis. When patients suffering from cirrhosis get to the point of death their clinical picture is so obvious that very few physicians are going to miss a diagnosis.

Cirrhosis always will be one of the many diagnoses that will be made in an alcoholic with several diagnostic possibilities. Cirrhotics have spiders, this lady apparently had none. She had a skin lesion, and I admire the doctor who made the observation. His description was very clear to me of nothing, but behind this description of nothing he said psoriasis, and I am inclined to believe him, I believe it is psoriasis.

She had a mild murmur. I see no reason to incur the wrath of the organization by calling it an S.B.E. and I don't believe these skin lesions were specific, just a case of another red herring.

Cirrhosis of Liver

Back to the cirrhosis of the liver. No observation was made of an enlarged liver or a small liver. We have a belly well distended, so I would presume then that this was not observed as a small liver which would be a contracted, stony liver, or a large liver which would be a fatty liver. Nobody saw any palmar edema or telangiectasia or altered tongue mucus membrane, things frequently seen in malnutrition associated with cirrhosis. She apparently had no other bleeding phenomena. This would imply that we are not dealing with overt liver pathology.

Now, another red herring. The lungs were normal. On examination several observers speak of lung congestion. This is apparently the terminal event after 48 hours in the hospital. This is also after a tube was put down the esophagus supposedly to compress esophageal varices. She apparently died of congestive heart failure, presumably secondary to an altered blood volume or vascular beds so her lungs were not normal. I presume for the first time that we don't have a red herring and that she probably had a hypostatic

pneumonia, one of the terminal events associated with a failing patient.

Another red herring, distended, silent abdomen: no allusion is made as to whether this silent abdomen was distended with gas or fluid, so I think perhaps we can turn to the X-rays.

X-ray Discussion:—Dr. Vincent Ravel:

I don't believe that this is the classical picture of a mechanical obstruction because I think I can see air all the way down to the rectum, and this soft tissue mass that you see there is most probably a distended bladder. The patient had Demerol and has an acute infection and this is to me more the picture of an adynamic ileus rather than that of a mechanical obstruction. The chest I think is fairly normal and I see no signs of hypostasis or congestive failure. There is no cardiac enlargement. I think with all the GI bleeding that is occurring you would have to think seriously of a bleeding ulcer.

Dr. Bornstein:

Are there any liver shadows on any of these pictures?

Dr. Ravel:

The liver shadow I think may be slightly enlarged to the left but it's pretty hard to tell. Certainly the gas shadows here obscure it.

Dr. Postlewaite:

This abdominal tumor is obviously gynecological in origin. She did not have a recent pregnancy and therefore not an amniotic embolus with pyelephlebitis or ovarian tumor with peritoneal metastasis.

Question:

Why didn't she have a pyelephlebitis?

Dr. Postlewaite:

Well, her count was only 13,000 on admission. Now I have finished the entire protocol and can start guessing what she had. This apparently is the case of an alcoholic who can metabolize alcohol as well as food. She drank heavy for a week and got in trouble with vomiting and blood which didn't reflect itself at least in her blood count. She was in shock. Now the problem is, what in alcoholism, followed by GI bleeding, followed by shock, will give us the clinical picture that our staff found in the emergency room. The one thing that impressed us on looking at the chart, and I'm sure the protocol won't give you this, is that she was seen on three occasions by three surgeons.

The house staff must have been impressed by her belly and the contents thereof. They did put a double lumen tube down and did blow up the end of it and obstruct the esophageal portion of the stomach. One must reflect on this a minute. The pressure was apparently high and Dr. Dow saw her and suggested the pressure be reduced. I presume one could tear the cardia of the stomach or the cardia of the esophagus and perhaps her deterioration was aggravated by this, too. Intubation in a shocked patient will occasionally cause perforation of a viscus and death secondary to the treatment rather than to the disease.

The impressive thing to me, though, is to use this tube in a woman who is not dying of a bleeding disease, pass this tube and to omit therapy of the gastro-intestinal tract because she had a tremendous distention of the GI tract, which is reflected in the chemistry. She had a low potassium. Now vomiting will give a low potassium, but when she received four transfusions, you get a tremendous amount of potassium. There is some evidence that she came out of shock with some levophed, but this was very temporary. She remained cyanotic.

Question:

The rectal examination did not reveal a lesion in the cul-de-sac?

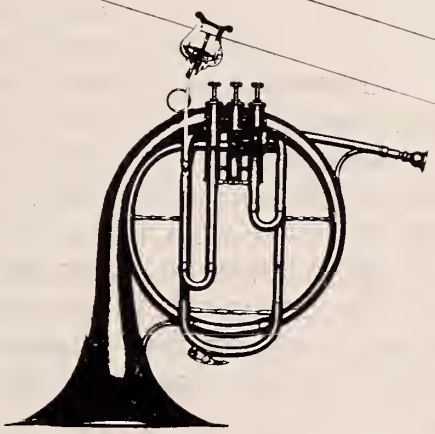
Dr. Postlewaite:

Apparently not. Now the rectal examination was done and the appearance of the stool was noted, thanks to the educational efforts of Dr. Gaddis because in the past we never noticed the stools on rectal examination. No effort was made apparently to discover what this pelvis held. Nothing might have been found on rectal examination because this tumor diagnosed by Dr. Ravel could be relieved by the catheterization of 1300 and some odd cc. of urine.

Well, I have thrown out the entire case except the brain. The patient was comatose and died. However, there was a lucid interval during which she gave some information. At that time she had a normal blood pressure, normal reflexes and normal pupils. Although she had a bruise on the left cheek I don't believe that she died of an acute hemorrhagic problem. If there would have been any diseases of the meninges or the epidural

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space there would have been convulsions. Usually patients die with convulsions after a longer stay in the hospital, something like ten days and for these reasons I do not believe that we have a brain problem here.

Now, what did she die of? Back to the chemistries. She had depressed chemistries, in spite of four transfusions and a lot of peripheral fluids. Therefore she was unable to manage her potassiums. Why didn't she manage her potassiums? She vomited prior to admission but one doesn't get the impression she was dehydrated unless her high hematrocit was one of dehydration.

Her sodium was low. This again would be a reflection of vomiting or probably may be due to weeping of circulatory fluids into the bowel. Some of these patients actually use their bowels as a kidney and as they used to say, puke themselves to death within their own bowel. Her calcium was low. Another red herring. There was no evidence of hyperparathyroidism. There is no history of recent pregnancy. There is no nutritional deficiency of vitamins. Neither was there any evidence of chronic pancreatitis. Therefore the low calcium just as the low potassium, is due to fluid and electrolyte loss. Calcium is not lost from the small bowel, it is lost from the large bowel. Therefore, if this was an obstruction it must have included the large bowel.

Liver Function Test

Urea nitrogen, 28. Well, that's another good liver function test because the retention here was not due to any renal disorder. Her output was excellent almost up to the time of death. As long as they kept the blood pressure up enough to achieve the necessary glomerular filtration she had good output. Therefore this urea nitrogen of 28 does not reflect renal disease or retention but probably reflects retention of urea nitrogen by the liver because of bleeding. This means that the liver functions adequately in handling the absorbed blood. As mentioned, the anylase was normal; otherwise this would be an excellent case of pancreatitis and we would find fat necrosis all over.

The Van den Bergh was 35 and this is apparently not due to an obstructive hepatic problem. They didn't operate because she was in shock and she was only maintained by efforts of the house staff. There was no chance apparently for surgery. Everybody recorded a silent abdomen, distended. No note is made as to whether there was asymmetry, no note is made as to whether a mass could be felt, no note is made as to a localization of tenderness, and so forth. Apparently the consultants felt that surgery should be done immediately, and one of the three suggested that a long tube be put down to decompress. The surgery couldn't be done and she died acutely, presumably in myocardial failure.

In summary, I don't believe the primary lesion is in the liver. I think our function tests have ruled out the liver as a major problem. There is disease in the GI tract. She did vomit fecal material and that implies obstruction, beyond the small intestine. The one thing that wasn't a red herring, was a long midline incision. I suspect that maybe some ovarian lesion or appendix was taken out, that she had a lot of adhesions, that something happened in terms of mesentery and bowel obstruction, possibly a vascular shut-off. She died of intestinal obstruction. The immediate cause of death was heart failure.

Dr. Licon:

Could all this be due to alcoholism?

Dr. Postlewaite:

I don't think she died of alcoholism intoxication. Her liver was in pretty decent shape and she lived several days.

Dr. Goldfarb:

I think one other thing should be mentioned. Chronic alcoholics in addition to drinking alcohol are also given to drinking a number of other different things which could cause an acute intoxication and death. They go into shock and die from something other than alcohol. They are not always too discriminating in what they are drinking.

Dr. Bornstein:

In acute alcoholism you die within less than 12 hours. If, for example, the alcohol is 500 mg.% and that is a simple central nervous system poisoning, you die with acute brain damage.

Dr. Postlewaite:

That is acute alcoholism—how about chronic alcoholism?

Dr. Bornstein:

We don't know exactly how chronic alcoholism kills, whether there is a direct toxic influence on the system or whether death is due to secondary malnutrition.

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Dr. Gaddis:

I didn't see this patient but I am impressed by certain things I see here on the radiographs and by this patient's course. She came into the hospital in shock, with high fever, distended abdomen which was quiet, and I think the cause of death lies between the diaphragm and pelvis of this patient. I must disagree with Dr. Postlewaite that it has anything to do with myocardial death.

This patient came too late into the surgeon's hands, no matter how soon they saw her: too late, because her peritonitis was already well developed and had been so for some time. It may have been that the cause for this patient's going on an acute alcohol binge was the pain in the abdomen that occasioned her increased drinking to the point of intoxication and although perforated ulcers very rarely bleed, there is no reason why this one couldn't have. She perhaps developed a profound peritonitis prior to admission to the hospital.

These pictures look to me like she had some plastic exudate between those loops of gut which I am sure could be due to peritonitis. Her fever goes well with this. It has been my misfortune since I have been in El Paso to have one patient die a similar death, without vomiting, without intoxication, but in shock, with good hematocrit and normal appearing blood count. This patient died after three days of peritonitis, an adrenal type death, in spite of all the measures that were done to keep her pressure up.

She had a low sodium and I believe that for the most part her adrenal cortex was just not functioning. This being the case, this patient was almost doomed before she arrived. I don't have any criticism to make of the person who put down the tube. I think I would probably have done the same thing. I think if we had been able to deflate the intestinal tract, we might have decreased the toxicity of the reaction she had. I don't think we had time enough; I don't think anybody who attended her had time to really take care of this problem as they should have. In respect to the elevation of the serum bilurubin, this test was done after she was given several units of blood and I don't think it is significant.

Dr. Ayub:

I agree with Dr. Gaddis in everything except the upper GI perforation. There does not seem to be any air beneath the diaphragm. This patient had a lot of gas all over her intestinal tract but I do believe she had some kind of ruptured viscus down in the lower pelvis. Probably the air that may have leaked through was not sufficiently under pressure to come up to the diaphragm but I do believe she did have peritonitis and I do believe she had some kind of inflammatory process of the intestinal tract, most likely a ruptured diverticulum which initiated the entire process.

Clinical Diagnosis: Intestinal obstruction.

Dr. Postlewaite's Diagnosis: Intestinal obstruction, mechanical, region of colon.

Pathological Diagnosis: 1. Partial mechanical obstruction of lower ileum due to old postoperative adhesions; (2) Combined mechanical and adynamic ileus; (3) Acute hemorrhagic infarction of small intestine; (4) Fatty cirrhosis of liver.

Pathological Discussion:—Dr. F. P. Bornstein:

On autopsy we found a distended abdomen and a scar running from the umbilicus to the symphysis pubis. On opening the abdomen there were a great number of adhesions, although the peritoneum as a whole was smooth and glistening. One of the adhesions went across the ileum and effectively cut off from circulation three or four distended and infarcted loops of small intestine. Therefore, this patient had an intestinal obstruction with corresponding metabolic and electrolytic disturbances. This was accompanied by very little exudate.

This represents essentially a problem of local infarction without generalized peritonitis.

Microscopic examination of this region showed typical changes of acute hemorrhagic infarction. In addition, this patient had a liver which weighed 3000 grams. The liver was yellow and doughy. The cut surface was pure yellow and on microscopic examination showed a typical cirrhotic pattern with total vacuolization of the individual liver cells.

In short, a fatty cirrhosis of the liver. We then have here two different conditions. A mechanical obstruction of the intestine, putting the load on a person whose metabolism was already damaged by the presence of a severe fatty cirrhosis of the liver. I believe that the liver was damaged and unable to maintain a proper metabolism and contributed to the shock and the quick death of the patient.

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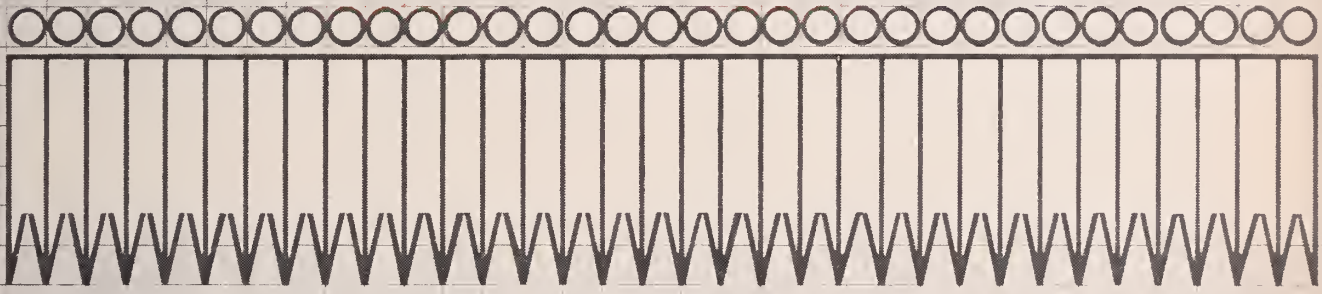
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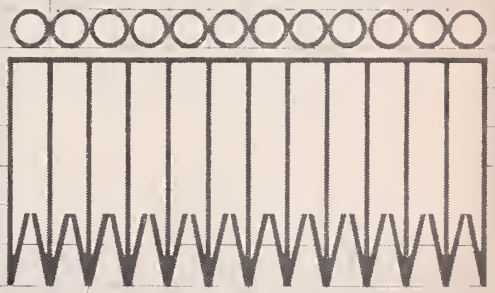
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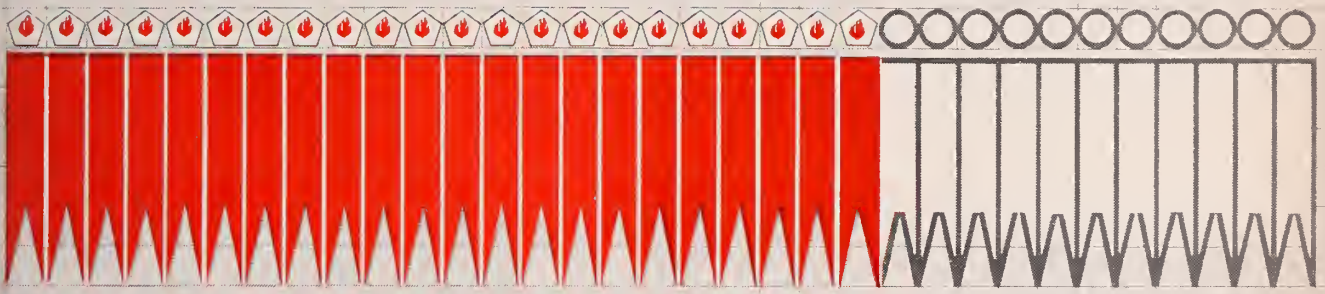
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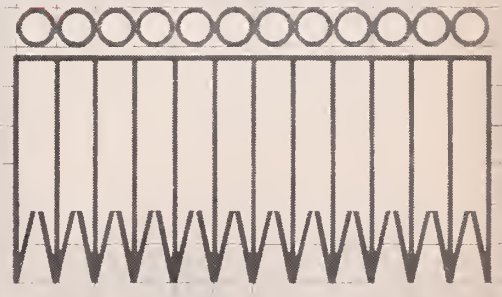
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1. Boland, E. W., and Headley, N. E.: Paper read before the Am. Rheum. Assoc., San Francisco, Calif., June 21, 1958.
2. Bunim, J. J., et al.: Paper read before the Am. Rheum. Assoc., San Francisco, Calif., June 21, 1958.

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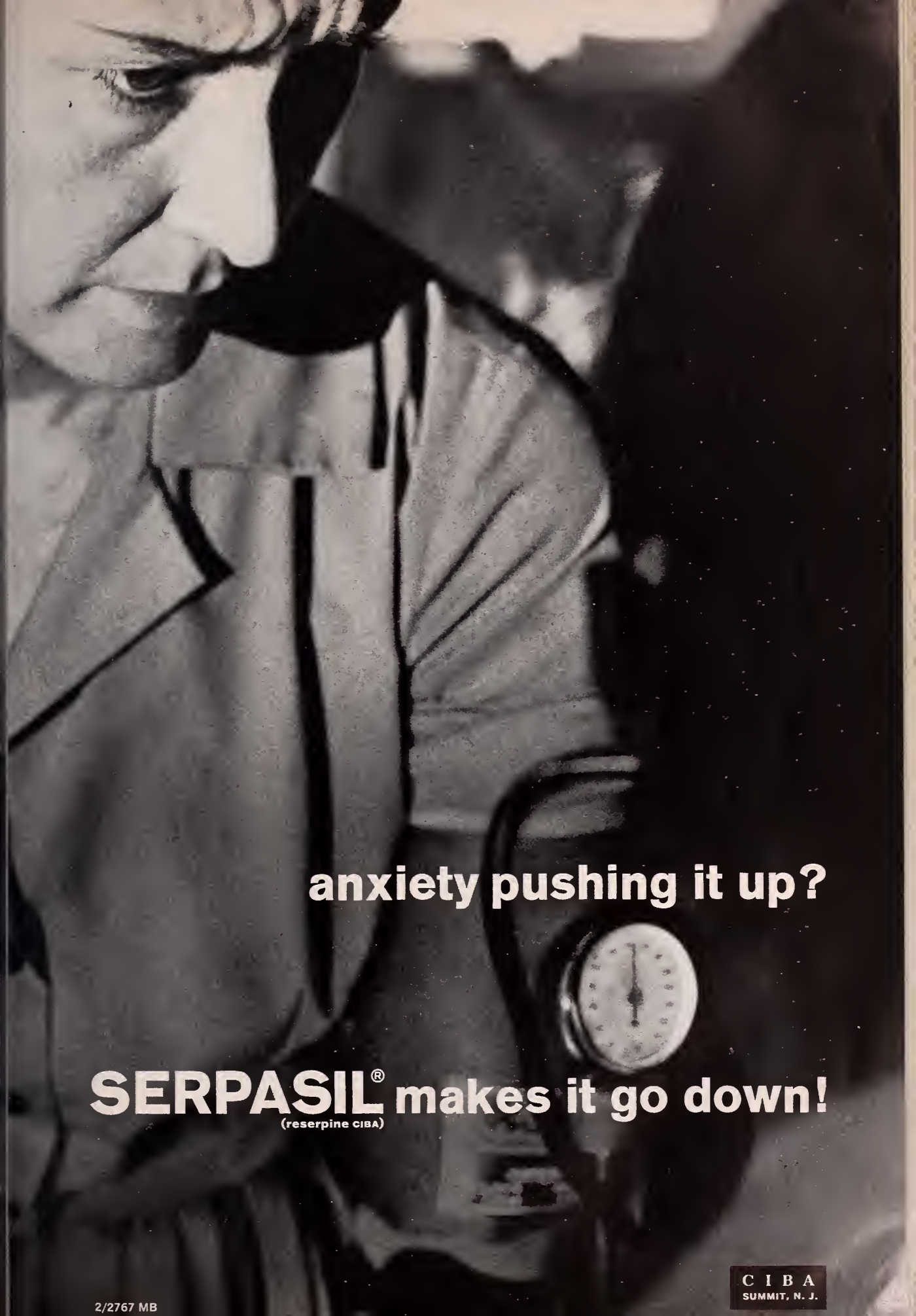
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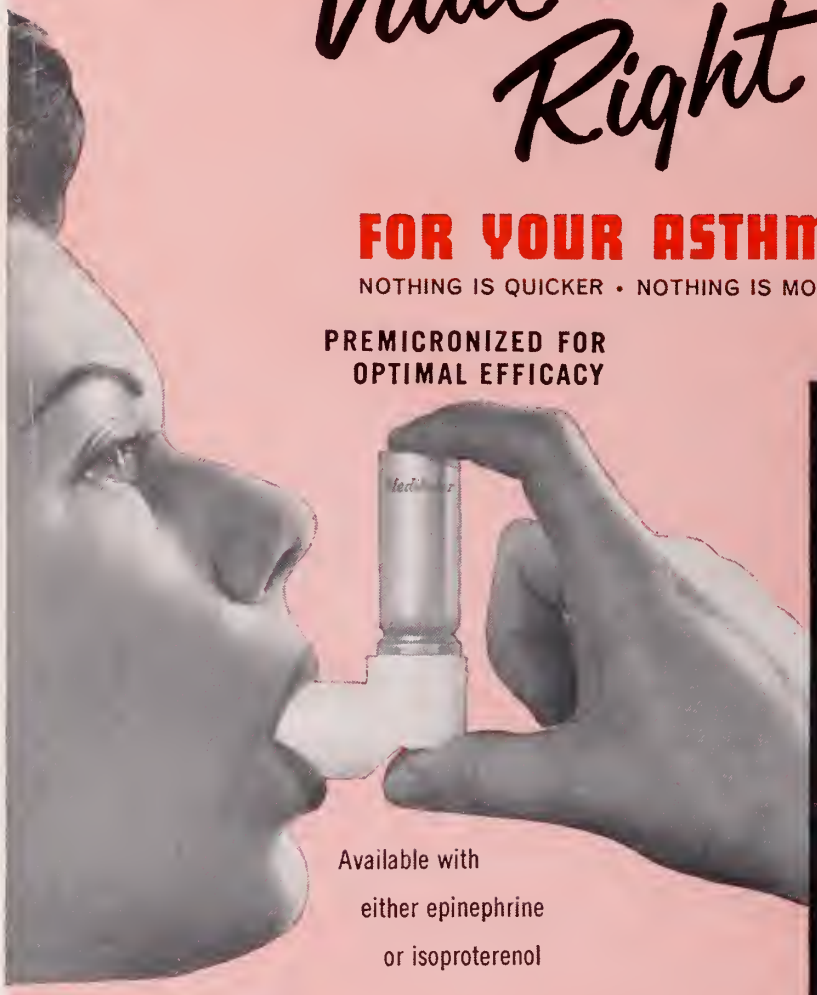
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APR 27 1960
NEW YORK ACADEMY OF MEDICINE

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1. Smith, I. M., and Soderstrom, W. H.: J. A. M. A., *170*:184 (May 9), 1959.

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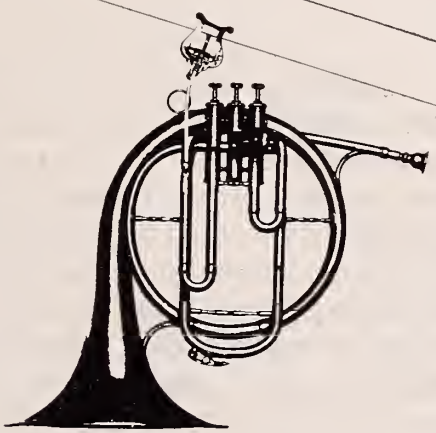
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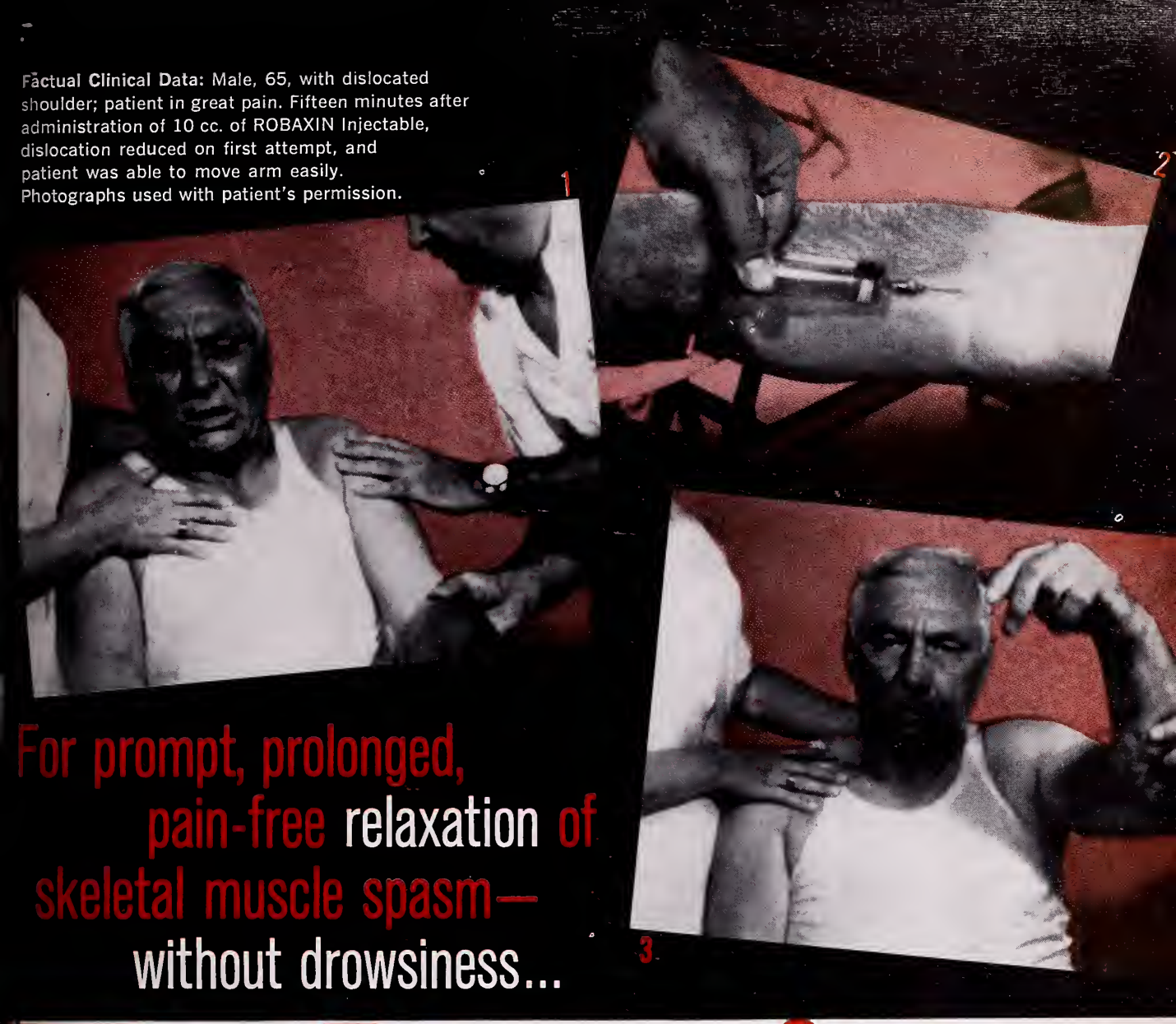
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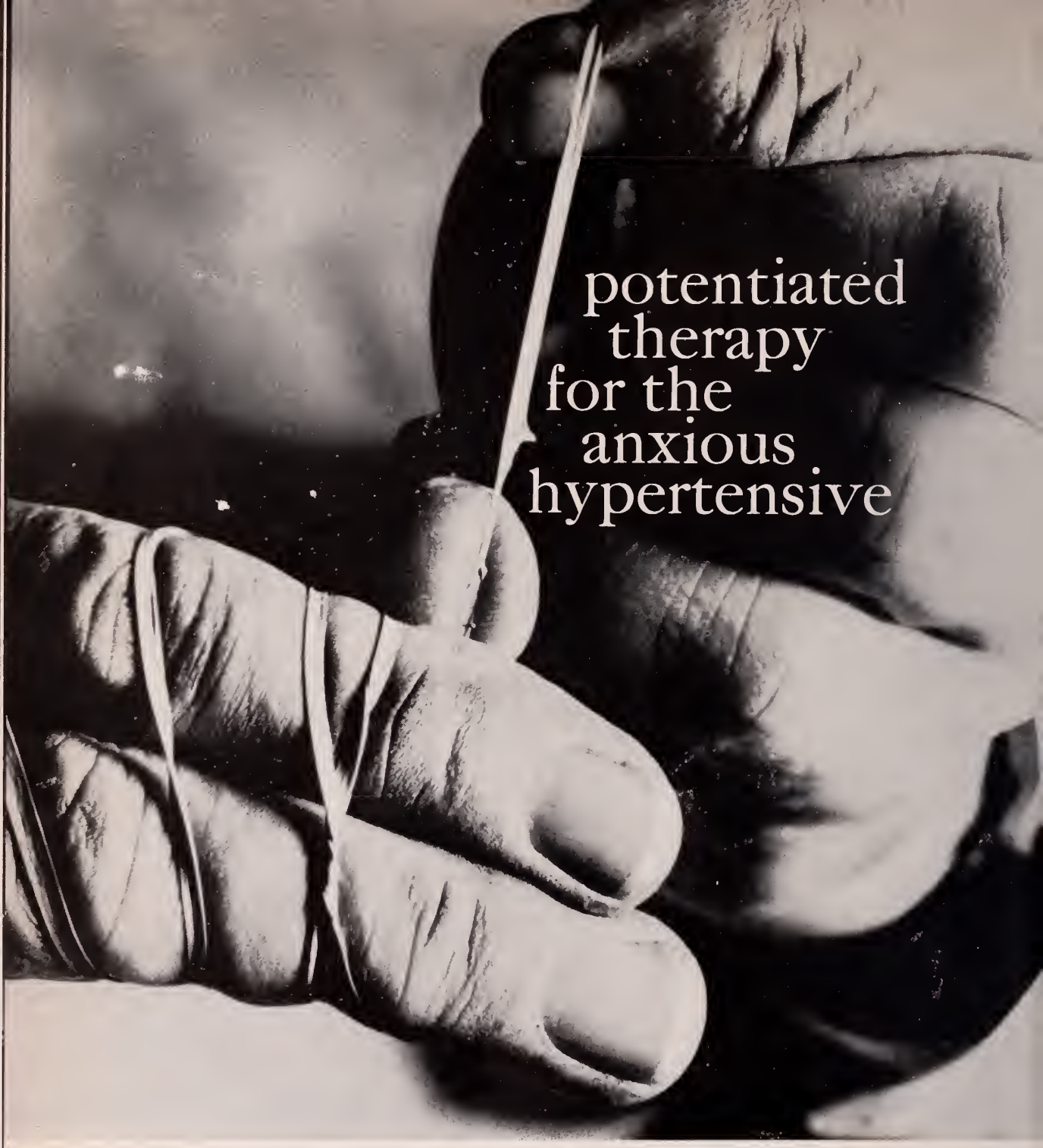
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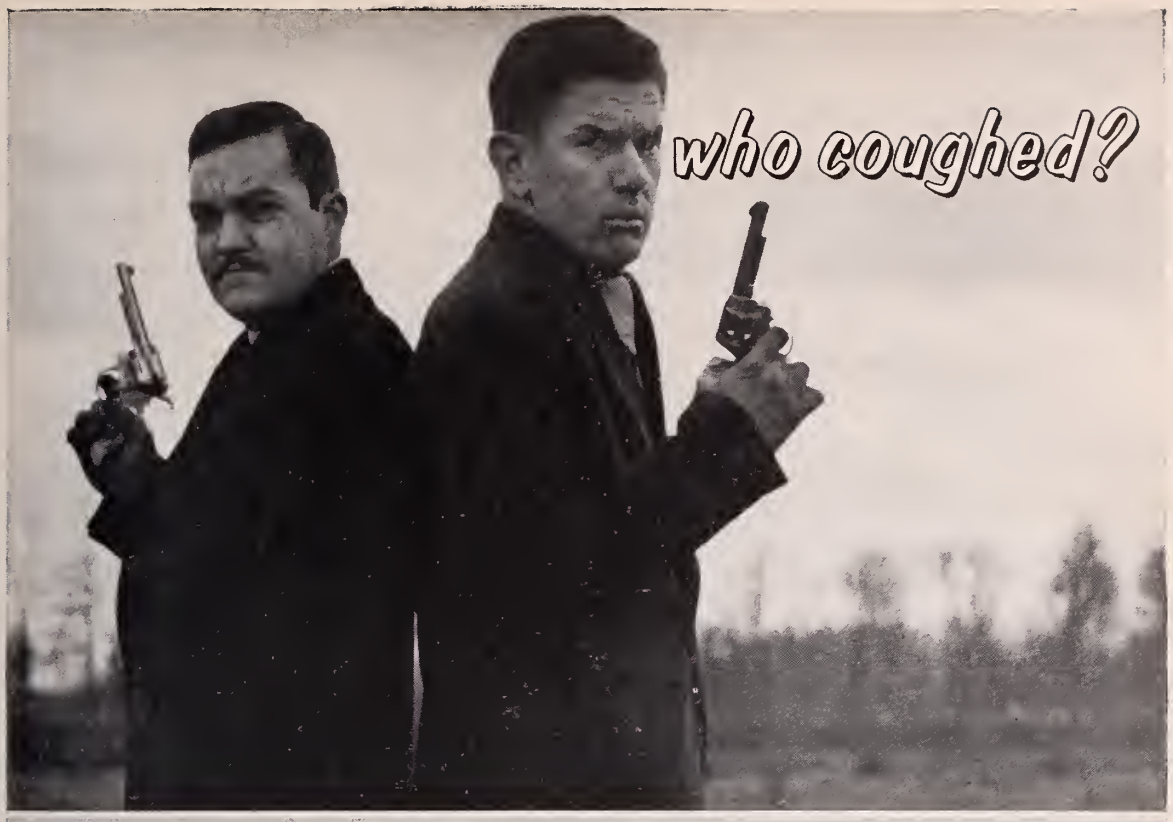
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Coming Meetings

Texas District One Medical Association, Annual Meeting, Pecos County Club, Pecos, Texas, Feb. 5, 1960. Chairman, Dr. Harold Lindley, 206 S. Oak St., Pecos.

Arizona Academy of General Practice, Psychiatric Seminar, State Hospital, Phoenix, Feb. 13-14, 1960. Approved for 14 hours Category I credit. Dr. James L. Grobe, chairman, 5630 N. 27th Ave., Phoenix.

The University of Texas Postgraduate School of Medicine, Postgraduate Course, Dermatology, Turner Home, 1301 Montana Avenue, El Paso, Feb. 14, 1960.

Fourteenth Annual Symposium on Fundamental Cancer Research, The University of Texas Postgraduate School of Medicine, M. D. Anderson Hospital and Tumor Institute, Houston, Feb. 25-27, 1960.

Medicine and Surgery Symposium, Hilton Hotel, El Paso, March 12, 1960, sponsored by El Paso County Medical Society and Lederle Laboratories.

American College of Surgeons, Sectional Meeting, The Broadmoore Hotel, Colorado Springs, March 21-23, 1960.

United States-Mexico Border Public Health Association, Annual Meeting, Hermosillo, Sonora, Mexico, April 4-8, 1960.

Texas Orthopaedic Association, Annual Meeting, Hilton Hotel, Fort Worth, April 11, 1960.

Arizona Medical Association, 69th Annual Meeting, Safari Hotel, Scottsdale, Arizona, May 4-7, 1960.

New Mexico Medical Society, Annual Meeting, Western Skies Hotel, Albuquerque, May 11-13, 1960.

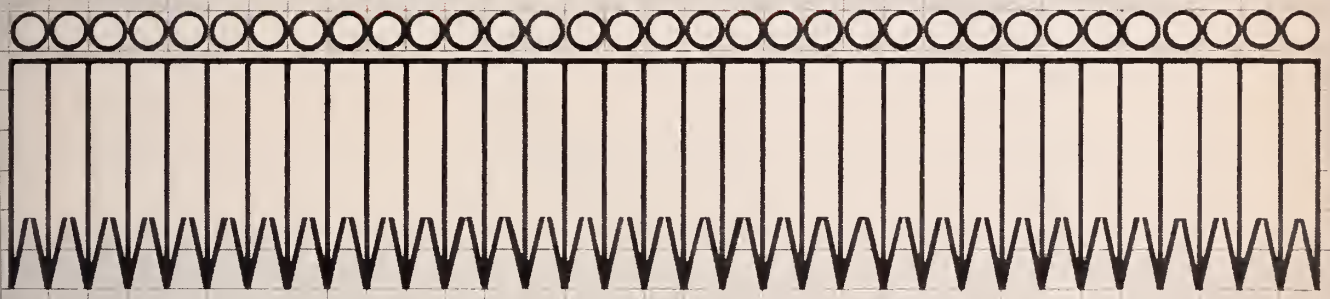
Southwestern Medical Association, 42nd Annual Meeting, Hotel Hilton, El Paso, Oct. 20-22, 1960.

Southwest Obstetrical and Gynecological Society, Annual Meeting, Las Vegas, Nev., Nov. 7-8, 1960.

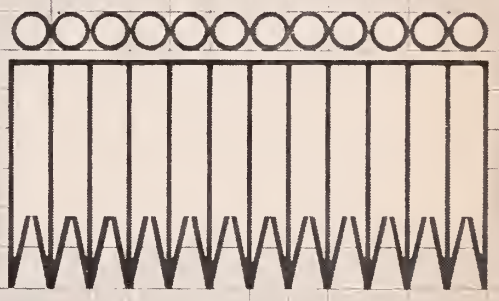
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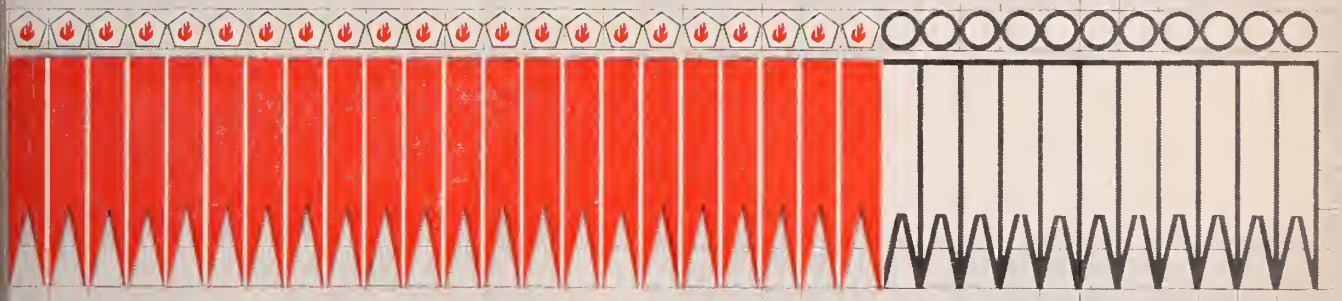
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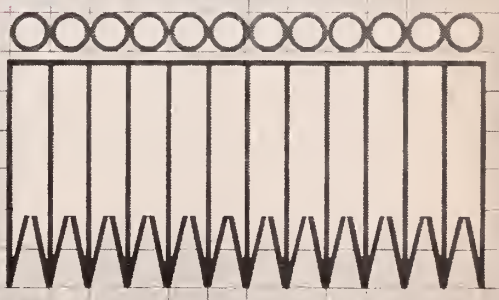
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1. Boland, E. W., and Headley, N. E.: Paper read before the Am. Rheum. Assoc., San Francisco, Calif., June 21, 1958.
2. Bunim, J. J., et al.: Paper read before the Am. Rheum. Assoc., San Francisco, Calif., June 21, 1958.

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References: 1. Cronk, G. A.; Naumann, D. E., and Casson, K.: Antibiotics Annual 1957-1958, New York, Medical Encyclopedia, Inc., 1958, p. 397. 2. Childs, A. J.: Brit. M. J. *1*:660 (Mar. 24) 1956. 3. Newcomer, V. D.; Wright, E. T., and Sternberg, T. R.: Antibiotics Annual 1954-1955, New York, Medical Encyclopedia, Inc., 1955, p. 686.

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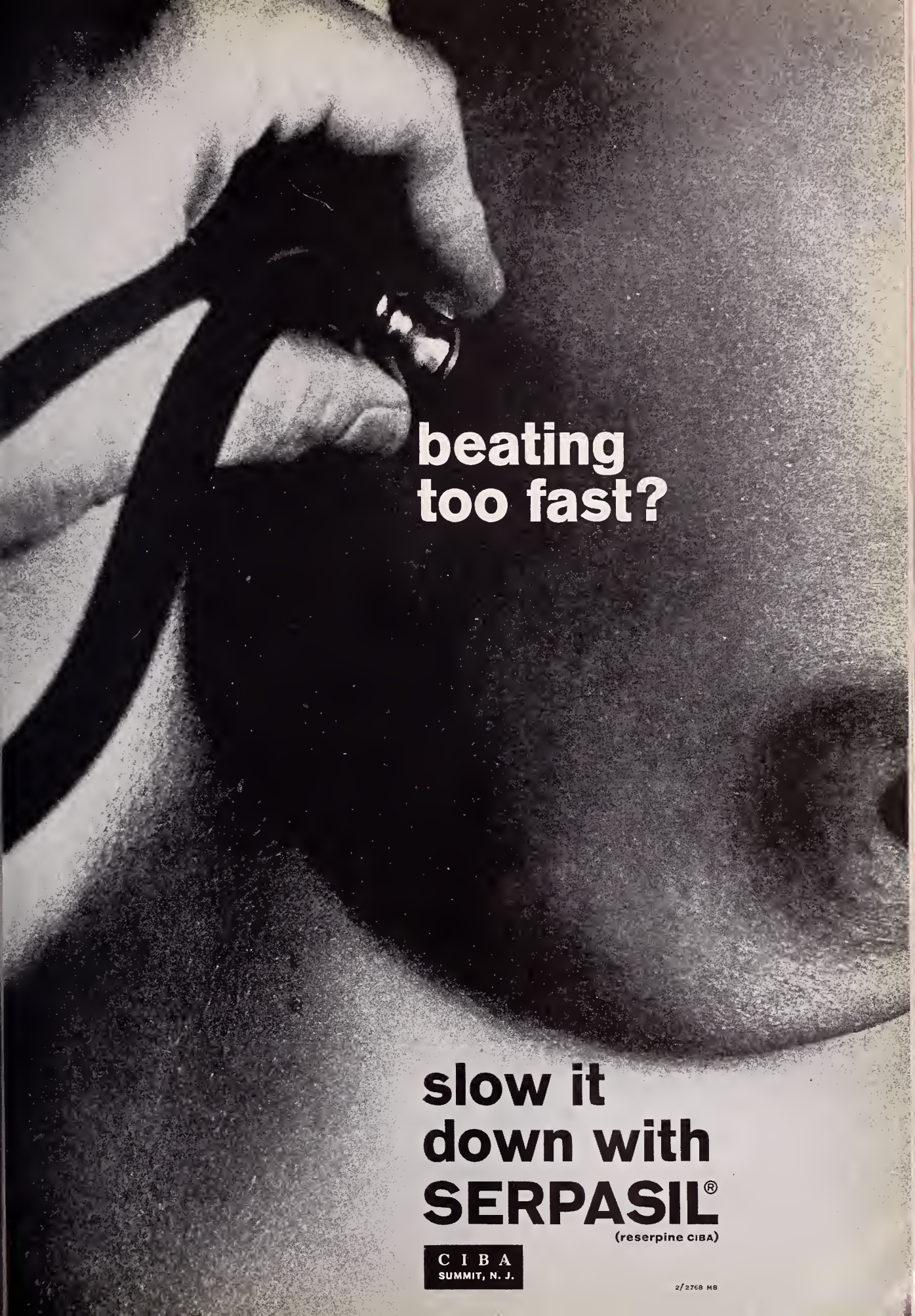
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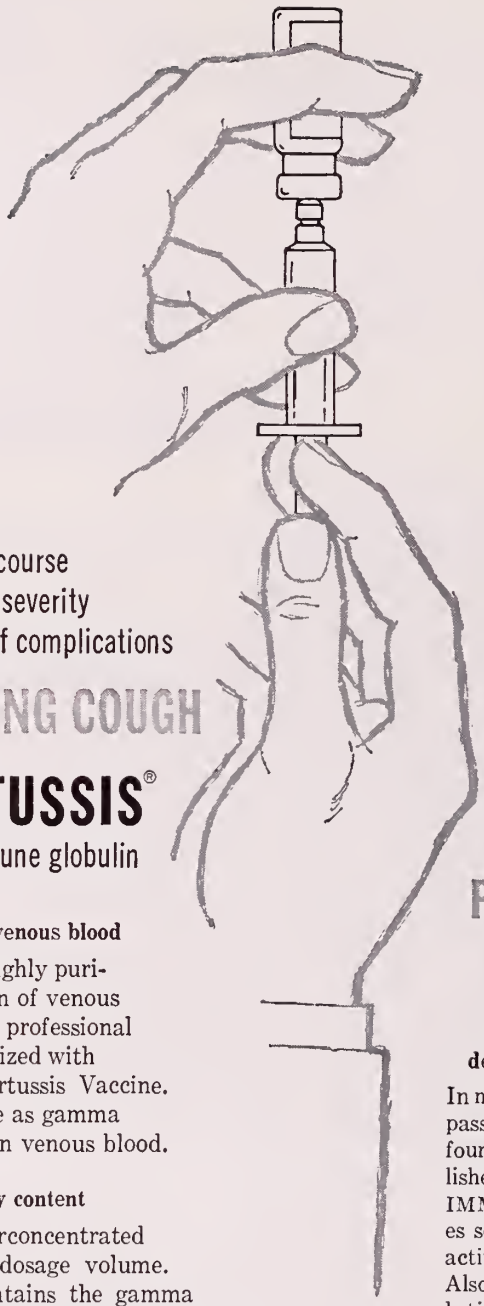
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SOUTHWESTERN MEDICINE

VOL. XLI, NO. 2 FEBRUARY, 1960

MEETINGS

Medicine and Surgery Symposium Scheduled in El Paso March 12

A Symposium on Clinical Medicine and Surgery, made possible by a grant from and with the cooperation of Lederle Laboratories, will be presented by the El Paso County Medical Society Saturday, March 12, in the Hilton Hotel in El Paso.

Physicians in West Texas and New Mexico are invited to attend. No fee is required for attendance at scientific sessions, luncheon or reception. Dr. Gordon L. Black of El Paso is program chairman. Wives of physicians are welcome and encouraged to attend.

Program

The complete program follows:

Morning Session, Spanish Ballroom

Moderator: W. R. Gaddis, M.D., El Paso

9:00 **Registration—all day**

10:00-10:40 The Continuing Problem of Resistant Staphylococcal Infections.
Robert I. Wise, M.D., Ph.D., Magee Professor of Medicine and Head of the Department, Jefferson Medical College, Philadelphia.

10:40-11:20 Diagnosis and Treatment of Gynecologic Diseases in the Adolescent.
Arthur D. Hengerer, M.D., Associate Professor of Obstetrics and Gynecology, Albany Medical College.

11:20-12:00 Questions and Panel Discussion.

12:15- 1:45 Luncheon for physicians and wives
West Ballroom
Chairman: Delphin von Briesen, M.D., President, El Paso County Medical Society, El Paso.

Speaker: George A. Constant, M.D., F.A.P.A., Associate Professor and Visiting Lecturer, Department of Neuropsychiatry, University of Texas Medical Branch. "Behavior Problems in our Children."

Afternoon Session, Spanish Ballroom

Moderator: Robert B. Homan, Jr., M.D., El Paso

2:00- 2:40 Early Recognition of Disabling Chest Disease.
Benjamin Felson, M.D., Professor and Director, Department of Radiology, University of Cincinnati College of Medicine.

2:40- 3:20 Evaluation of the Acute Abdomen.
N. Frederick Hicken, M.D., Associate Professor of Clinical Surgery, University of Utah College of Medicine.

3:20- 3:40 Coffee

3:40- 4:25 Questions and Panel Discussion.

4:45- 5:45 Reception
West Ballroom

St. Louis Ob-Gyn Specialist to Speak in Carlsbad, N. M.

Dr. Samuel D. Soule, St. Louis, Mo., Associate Clinical Professor in Obstetrics and Gynecology at Washington University, will speak to members of the medical staff of the St. Francis Hospital in Carlsbad, N. M., at 7:30 p.m. February 29, 1960. Physicians in Southeastern New Mexico are invited to attend.

Dr. Soule's topic will be "Functional Disturbances of Women." Immediately following the address there will be a clinical question and answer session more closely related to Obstetrics and Gynecology, inasmuch as this is Dr. Soule's specialty. He is expected to report on activity in that field at Washington University.

Dr. Soule is a Fellow in the American College of Surgeons and a member of the American Board of Obstetrics and Gynecology. He has published considerable work in Endocrinology from both the viewpoints of clinical application and evaluation in the two sister fields of Obstetrics and Gynecology.

Information on the meeting and reservations may be obtained by contacting Thomas J. Shinas, assistant administrator at St. Francis Hospital.

Postgraduate Dermatology Course Scheduled in El Paso Feb. 14

A one-day course in Dermatology will be presented between 8:30 a.m. and 5:00 p.m., Sunday, Feb. 14, 1960, by the El Paso Division of the University of Texas Postgraduate School of Medicine, Dr. J. Leighton Green, director of the El Paso Division, has announced.

The course has been approved by the Texas Academy of General Practice for seven hours credit in Category I. Advance registration is requested. Complimentary enrollment will be granted to residents, interns and faculty members upon satisfactory completion of applications.

The program is supported in part by an educational grant from the Merck Sharp and Dohme Postgraduate Program.

The meeting will be held in the El Paso County Medical Society's Turner Home at 1301 Montana Avenue.

The complete program is as follows:

8:30- 9:20 a.m.	Common Dermatoses—Dr. J. B. Robbins, El Paso.
9:20-10:10 a.m.	Use of Griseofulvin in Dermatomycoses—Dr. Leslie M. Smith, El Paso.
10:25-11:15 a.m.	Cutaneous Manifestations of Systemic Disease—Dr. Herman J. Schultz, Houston.
11:15-12:05 a.m.	Steroids in Dermatology—Dr. H. D. Garrett, El Paso.
1:30- 5:00 p.m.	Clinicopathologic Conference on Diseases and Neoplasms of the Skin—Dr. Herman J. Schultz and Dr. J. Leslie Smith, Jr., Houston. Case abstracts will be studied with a discussion of the clinical features, histopathology, and differential diagnoses.

Southwestern New Mexico Medical Society to Meet

The regular meeting of the Southwestern New Mexico Medical Society will be held February 18, 1960, at Las Cruces, N. M. Harold B. Cresilneck, Ph.D., Professor of Clinical Psychology, University of Texas, Southwestern Medical School in Dallas, will be the speaker.

Dr. Cresilneck's subject will be "The Uses and Abuses of Hypnotism in Clinical Medicine."

The meeting will be a dinner affair starting at 7:00 p.m. in the Las Cruces Country Club. Wives are invited. Reservations should be made by Feb. 10 and should be addressed to Dr. C. Wallace Carroll, Secretary of the Dona Ana County Medical Society, 420 West Griggs St., Las Cruces, N. M.

Physicians from Luna, Dona Ana, Otero and Grant counties and the El Paso area are expected to attend. The Dona Ana County Medical Society will be the host group.

American Medical Association
13th Clinical Meeting

Report on Actions
of the House of Delegates

Freedom of choice of physician, relations between physicians and hospitals, a scholarship program for deserving medical students and relative value studies of medical services were among the major subjects acted upon by the House of Delegates at the American Medical Association's Thirteenth Clinical Meeting held December 1-4 in Dallas.

Dr. Chesley M. Martin of Elgin, Okla., was named as the 1959 General Practitioner of the Year for his outstanding contributions to the health and civic affairs of his home community. Dr. Martin, who has practiced in Elgin for the past 44 years, was the 13th recipient of the annual award and the first Oklahoman to be so honored.

Speaking at the opening session of the House, Dr. Louis M. Orr of Orlando, Fla., A.M.A. President, urged the nation's physicians to take a more active interest in the whole area of politics, public affairs and community life. Dr. Orr also asked physicians and medical societies to do a more effective job of telling medicine's positive story, adding that "if more people knew more about the things we support and encourage, they would listen to us much more carefully about those occasional things that we oppose."

Freedom of Choice

In considering four resolutions which in various ways would have changed or replaced the statements on freedom of choice of physician which the House adopted in June, 1959, when acting upon the recommendations in the report of the Commission on Medical Care Plans, the House reaffirmed the following two statements approved in Atlantic City:

1. "The American Medical Association believes that free choice of physician is the right of every individual and one which he should be free to exercise as he chooses."

2. "Each individual should be accorded the privilege to select and change his physician at will or to select his preferred system of medical care, and the American Medical Association vigorously supports the right of the individual to choose between these alternatives."

However, in order to clarify and strengthen its position on the issue of freedom of choice of physician, the House also adopted this additional statement which was submitted as a substitute amendment on the floor of the House:

3. "Lest there be any misinterpretation, we state unequivocally that the American Medical Association firmly subscribes to freedom of choice of physician and free competition among physicians as being prerequisites to optimal medical care. The benefits of any system which provides medical care must be judged on the degree to which it allows of, or abridges, such freedom of choice and such competition."

Physician-Hospital Relations

The House received 12 resolutions on the subject of relationships between physicians and hospitals. To resolve any doubt about its position, the House did not act upon any of the resolutions but instead reaffirmed the 1951 "Guides for Conduct of Physicians in Relationships with Institutions." It also declared that "all subsequent or inconsistent actions are considered superseded."

The House also accepted recommendations that (1) the House of Delegates acknowledge the need to strengthen relationships with hospitals by action at state and local levels, (2) the Board of Trustees of the Association continue to maintain liaison with the Board of Trustees of the American Hospital Association, and (3) the Council on Medical Service review this entire problem to ascertain if there have been actions inconsistent with the 1951 Guides.

Those Guides summarize the following general principles as a basis for adjusting controversies:

"1. A physician should not dispose of his professional attainments or services to any hospital, corporation or lay body by whatever name called or however organized under terms or conditions which permit the sale of the services of that physician by such agency for a fee.

"2. Where a hospital is not selling the services of a physician, the financial arrangement if any between the hospital and the physician properly may be placed on any mutually satisfactory basis. This refers to the remuneration of a physician for teaching or research or charitable services or the like. Corporations or other lay bodies properly may provide such services and employ or otherwise engage doctors for those purposes.

"3. The practice of anesthesiology, pathology, physical medicine and radiology are an integral part of the practice of medicine in the same category as the practice of surgery, internal medicine or any other designated field of medicine."

Scholarship Program

To help meet the need for an increasing number of physicians in the future, the House approved the creation of a special study committee which was asked to:

1. Present a scholarship program, its development, administration and the role of the American Medical Association in fulfilling it.

2. Ascertain the maximum to which medical schools could expand their student bodies while maintaining the quality of medical education.

3. Ascertain what universities can support new medical schools with qualified students and sufficient clinical material for teaching—either on a two year or a full four year basis.

4. Investigate the securing of competent medical faculties.

5. Investigate financing of expansion and establishment of medical schools.

6. Investigate financing of medical education as to the most economical methods of obtaining high quality medical training.

7. Develop methods of getting well-qualified students to undertake the study of medicine.

8. Investigate the possibility of relaxing rigid geographic restrictions on the admission of students to medical schools.

The House urged that the special committee be implemented promptly with adequate funds and staff so that it may make an initial report by June, 1960.

Relative Value Studies

Reaffirming a previous policy statement, the House approved in principle the conducting of relative value studies by each state medical society, rather than a nationwide study or a series of regional studies by the A.M.A. The House also reiterated its authorization for the Committee on Medical Practices to inform each state medical association, through regional or other meetings, of the purpose, scope and objectives of such studies, the steps to be followed in conducting studies, the problems which may be encountered and the manner in which the results can be applied.

The House recognized, however, that some state medical societies are either not interested in relative value studies or are actively opposed to them. It pointed out that some state medical associations fear that the regional conferences of the Committee on Medical Practices will put pressure on them to carry out such studies and that this will result in the adoption of "fixed fees."

Since the regional conference are educational in nature, the House said, it remains for each state or county medical association to accept or reject the idea of a study in its area.

The House expressed awareness of the fact that this is still a controversial matter. However, it commended the Committee on Medical Practices for its effort to carry out the instructions of the House, and it urged the committee to continue its educational work.

Miscellaneous Actions

In considering 44 resolutions and a large volume of annual, supplementary and special reports, the House also:

Learned that the A.M.A. Board of Trustees has appointed a liaison committee to meet with a similar committee of the **American Osteopathic Association** to consider matters of common concern;

Emphasized that local medical societies should insure that no member violates ethical traditions as they relate to ownership of **pharmacies** or stock in pharmaceutical companies;

Approved the plan of the Committee on Medical Rating of Physical Impairment to publish its new guide on the **cardiovascular system** in the A.M.A. Journal;

Called for investigation of the need, desirability and feasibility of establishing a home for **aged and retired physicians;**

Urged active promotion and careful study of the newly developed "Guides for Medical Care in **Nursing Homes** and Related Facilities";

Suggested that fees for consultative examinations under programs of the **Bureau of Old Age and Survivors Insurance** should be adjudicated directly between the state medical society and the state agency involved;

Registered a strong protest to the **Veterans Administration,** urging stricter screening of non-service-connected disability patients admitted to government hospitals;

Reiterated the Association's support of the **Blue Shield** concept and directed the Council on Medical Service to submit at the June, 1960, meeting its recommendations concerning a policy statement on A.M.A. relationship with Blue Shield plans;

Suggested that S.J. Res. 41, a bill which would institute a separate program of **international medical research,** be delayed until an over-all assessment can be made of proposals now before Congress dealing with domestic and international medical research;

Endorsed the program of the Educational Council for **Foreign Medical Graduates** but also urged that judicious consideration be given to local problems involved in the July 1, 1960, deadline for certification of foreign graduates;

Urged that **medical schools** include in their curricula a course on the social, political and economic aspects of medicine;

Declared that the threat of **nuclear warfare** has imposed a tremendous responsibility on the medical profession, which must be prepared to assume a critically important role in such an event;

Suggested that the A.M.A. make available to school libraries **information and literature** showing the advantages of private medical care and the American free enterprise system;

Stated that examinations to determine the physical and mental fitness of **aircraft crew members** should be made by doctors of medicine with special knowledge and proficiency in certain techniques;

Urged the American peoople to get proper **tetanus toxoid,** original and booster, and other immunizations as indicated from their physicians, and called on A.M.A. members to cooperate in an educational program on tetanus immunization;

Recommended that all state and county medical societies establish programs for the inspection and testing of all **fluoroscopes and radiographic equipment;**

Called upon each individual physician to wage "a vigorous, dynamic and uncompromising fight" against the **Forand type of legislation;**

Urged state and local medical societies and individual physicians to implement the A.M.A. program for recruitment of high-grade **medical students;**

Accepted with appreciation a $2,500 contribution by Smith, Kline and French Laboratories toward establishment of a suitable award honoring the name of **Dr. Thomas G. Hull,** retiring secretary of the Council on Scientific Assembly, and

Reaffirmed the "Suggested Guides to Relations Between Medical Societies and **Voluntary Health Agencies,**" which were adopted at the December 1957, meeting in Philadelphia.

At the Tuesday opening session, six state medical societies presented nearly $250,000 to the American Medical Education Foundation. The checks turned over to Dr. George F. Lull, president of AMEF, were: California, $156,562; Indiana, $35,570; New York, $19,546; Utah, $10,355; New Jersey, $10,000, and Arizona, $9263.

Geriatrics Symposium is Held at University of New Mexico

A New Mexico-wide symposium on problems of the aged, sponsored jointly by the New Mexico Medical Society and the New Mexico Dept. of Public Health, was held in the Student Union Building at the University of New Mexico in Albuquerque Jan. 23 and 24.

Principal speakers were Dr. Theodore G. Klumpp, New York, member of the American Medical Association Committee on Aging and president of Winthrop Laboratories; Howard I. Wells, Chicago, executive secretary of the Joint Council to Improve Health Care of the Aged; and William Fitch, Washington, D. C., executive director of the Retired Teachers and Retired Persons Association.

The three speakers were among 40 panellists who discussed hospitalization, rehabilitation, financing for the aged, health care, community planning, group and community responsibility, housing, home makers services, nursing home services and nursing care. Participating in the symposium were leaders in the field of medicine, industry, labor, insurance, voluntary health agencies, rehabilitation, hospitalization, recreation, nursing homes, nursing, government, employment, home building, housing, religion, dentistry and sociology.

Plans for the meeting were worked out by Dr. Samuel R. Ziegler, Espanola, past president of the New Mexico Medical Society and chairman of the society's committee on aging; Dr. Stanley J. Leland, director of the State Health Department; and Dr. Molly Radford, director of the State Health Department's division on gerontology.

Anti-Inflammatory Steroids for Systemic Use

By A. E. Leiser, M.D., *Houston*

Proper Name	Common Name	Anti-Inflammatory	Salt Retention	Comparable Dosage	Special Use	Unusual Side Effect
Cortisone	acetate } for succinate } parenteral use	0.8	1.0	25 mg.	Rx as hydrocortisone. Rarely indicated	All features of Cushing's with considerable electrolite disturbance plus ulcer development
Hydrocortisone	Ditto	1.0	1.0	20 mg.	Drug of choice as adrenal replacement Rx	Ditto
Prednisone	Meticorten Deltra Deltasone Paracort	4.0	.6	5 mg.	Preferable for its anti-inflammatory and related effects	Same as above plus ecchymoses
Prednisolone	Metacortalone Hydrelta Cohydrelta Delat Cortef Para Cortal	4.0	.6	5 mg.	Same	Ditto
Methyl-Prednisolone	Medrol	5	slight	4 mg.	Same	Ditto
Triam-cinalone	Aristocort Kenacort	5	slight	4 mg.	Same	Ditto plus weakness, muscle wasting, unexplained weight loss
Dexamethasone	Decadron Deronil	30	slight	.75 mg.	Same Drug of choice where adrenal diagnostic studies are indicated	All Cushing's, excess appetite, insomnia, less diabetogenic effect
Fluoro-Hydro-cortisone	Fluorinef	20	80	1.0 mg.	As supplement for adrenal replacement Rx	Marked salt retention
Desoxy-Corti-costerone	Percortan Cortate Poca	0	20		For salt retention Seldom used presently	Salt retention Occas. arthritis
Aldosterone	Not available	.2	200		Research use only	

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THE PRESIDENT'S PAGE



Dr. Deter

Medical Public Relations

By Russell L. Deter, M.D., *El Paso*
President, Southwestern Medical Association

Medical public relations is not press agentry. Too often doctors are of that opinion. Medical public relations, in essence, is our relations with our patients and the public. It embraces an evaluation of public attitudes, the identification of the policies and procedures of medicine with the public interest, and the execution of a program of action designed to earn public understanding and acceptance.

There are two phases of medical public relations that deserve some consideration. First is the individual doctor and his relationship with the public. Second, the organization of medicine and its relationship with the public. The first, from national surveys and personal experience, is generally good on the whole. Doctors, however, sometimes forget that their personal relationship with the public so very much influences how the public reacts to the organizaion of medicine. Kindness, consideration, attention to duty, remembering that many times a patient's family is much sicker than the patient and needs some attention too, are some of the polite things that influence personal public relations. You notice nothing has been said about professional skill and ability. This is most important — but, by itself, it is not enough. We have all heard a patient say — "He is an expert specialist in his field, but cold as ice!" Others say, "My doctor is so wonderful and kind and he knows what he is doing too!"

Community Problems

An individual physician *must* react to his community problems—at least where medicine, health, sanitation, etc., are concerned. He *should* react to those community problems that will make it a better place in which to live, and give them his moral, physical and financial support. This then, in the true sense of the word, *is* personal public relations. If he has a personal opinion about public matters he should express them to his friends and patients — again still on a personal basis. The individual physician must always remember that he is a public figure and that his personal life, his behaviour in public and how he and his family appear to the public influences very much his, as well as medicine's, public relations.

Section No. 10 of the Principles of Medical Ethics which reads:

"The honored ideals of the medical profession imply that the responsibilities of the physician extend not only to the individual, but also to the society where these responsibilities deserve his interest and participation in the activities which have the purpose of improving both the health and well-being of the individual and the community" — should always be kept in mind. Do you actively exercise your privileges of citizenship? Do you vote?

Different Role

The organization of medicine has a quite different role in its relations with the public. The organization, by the composition of its membership, must be non-partisan in those community affairs that involve differences of opinion on religion, race, creed or color.

The organization of medicine must work hand in glove with the press:

"The press and medicine have a lot in common. Both have tremendous responsibilities to the public. Newspapers are concerned with the ills of society, the doctors are concerned with the ills of the individual. It is to the advantage of physicians, hospitals and the press that the public be provided with prompt and accurate information within bounds of good taste. Since the press is responsible for what it publishes, it must be sole judge of what shall be published. Where the source of news is a physician, the press should assume the obligation to consider the life and health of patients and to recognize the ethics by which doctors are bound."*

I repeat again — public relations in medicine is not press agentry. How responsible to the public, and how available, is your County Society to various groups in your community to help in their health affairs? Is your county society taking the leadership it should in your community health problems? By leadership I mean constructive leadership — not destructive.

Medical Problems

Is your County Society doing something about solving such problems as:

1. Endeavoring to see that everyone, regardless of his or her ability to pay, receives good medical care?

2. Actively supporting a positive plan to see that old people receive the medical care that they need?

3. Perfecting a plan of emergency medical care on around-the-clock basis?

4. Providing an active, effective public grievance mechanism for those who do have legitimate inquiries and complaints?

5. Assuming responsibility for providing an adequate supply of physicians for the community?

6. Endeavoring to resolve community problems, particularly with regard to medical issues?

7. Actively engaged in encouraging desirable legislation in the public interest? Are you doing something about these problems?

Granted some of these are the function of local health officers, but are you — as an organization — giving them your support? If your County Society is doing these things, is the general public aware that your society is responsible for these various improvements in health care? If they are not — then your organization public relations is lacking.

As Dr. Charles Mayo once said.

"Medicine is about as big or as little in any community, large or small, as the physician makes it!"

(*Taken from AMA News — 16 Nov. 59).

TEXAS DISTRICT ONE MEDICAL ASSOCIATION

ANNUAL MEETING

PECOS, TEXAS

FEBRUARY 5, 1960

ORIGINAL ARTICLES

An Axial View of the Hip Joints

Preliminary Report

By Samuel L. Cohen, M.D., *Radiologist, Phoenix*

The early diagnosis of congenital hip dislocation or dysplasia before the infant stands is important and at times very difficult, both clinically and radiologically. (1) Recently upon trying the squatting view of the sigmoid rectum on barium examination, I was impressed with the remarkable view of both hip joints. The question arose as to whether this view would be of help in the early and more accurate diagnosis of hip dysplasias.

A small series of cases of normals and of congenital hip dislocation and dysplasias were collected and studied with this axial view. (Figs. 1,

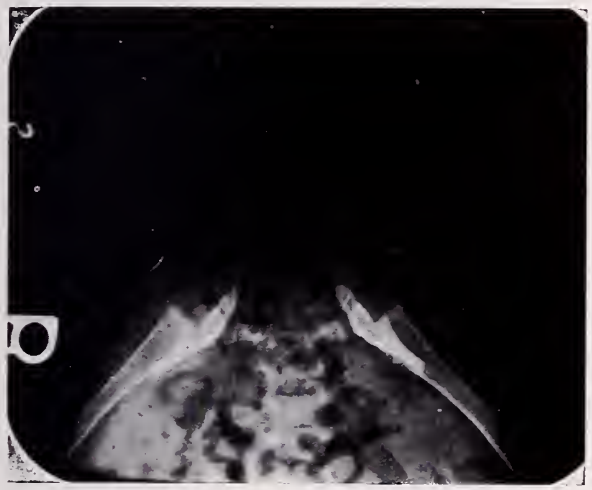


Figure 1

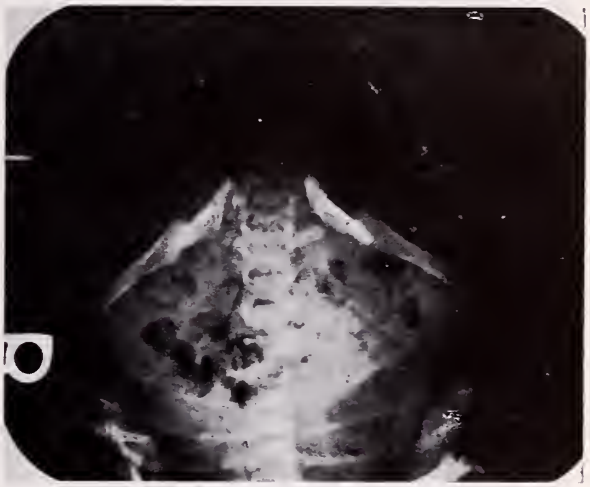


Figure 2



Figure 1a



Figure 2a

Figures 1 and 1a. Normal 1½ year infant.

Figures 2 and 2a. Normal six months infant.

2, 3, 4 and 5) Examination of these prints very evidently, I think, shows how clearly the actual hip joint itself can be seen. Clear demonstration, I think, is possible and minor anterior or posterior subluxations are easily seen. Mediad pressure on both knees simply produces tension on the hip joint capsules. This should, if there is a lax hip joint capsule, help in the demonstration of a minor subluxation.

Technical factors in the taking of this view are the same as those for a routine A.P. of the pelvis. These factors, of course, can be easily altered. See Figs. 6 and 7 "Positioning."

Summary

An axial view of the hip is presented which we think will help in the early diagnosis of congenital hip dysplasia. A large series of normal cases and questionable hip dislocations will be necessary before the usefulness of this view can be proven.

I would like to acknowledge the clinical orthopedic evaluation of these cases given me by Dr. Charles Lofdahl and the U.S. Public Health Indian Service.

I also would like to acknowledge the technical help given me by R. T. John van Kilsdank and Doris Newton and also to Marie Blaske for the secretarial help.



Figure 3

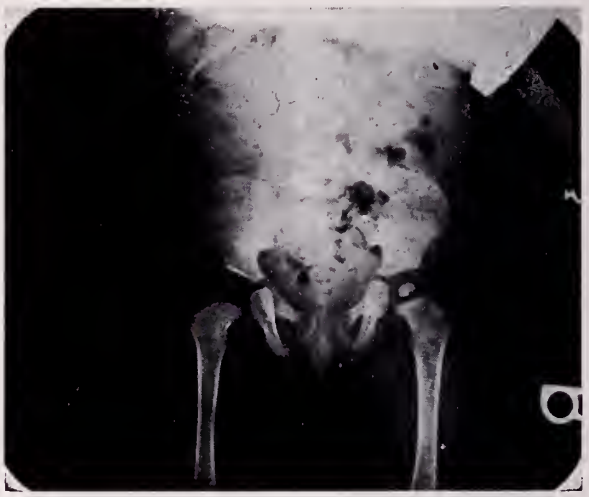


Figure 4



Figure 3a



Figure 4a

Figures 3 and 3a. Bilateral hip dislocation.

Figures 4 and 4a. Left hip dysplasia; no dislocation.

References

1. Contradiction of the Congenital Dysplasia-Predislocation Hypothesis of Congenital Dislocation of the Hip Through a Study of the Normal Variations in Acetabular Angles at Successive Periods in Infancy. Caffee-Ames-Silverman-Ryder & Hough, Pediatrics, Vol. 17, May, 1956, Pg. 632-640.



Figure 5

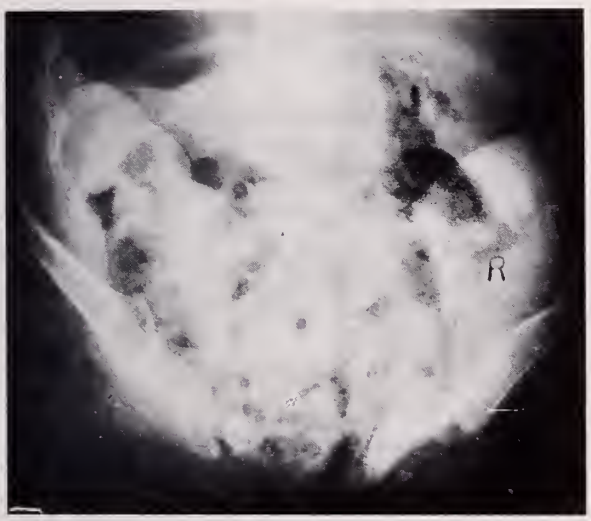


Figure 5a

Figures 5 and 5a. Small right femur epiphysis with very mobile hip joints. Negative PE for dislocation. X-Ray (axial) shows mild posterior displacement.

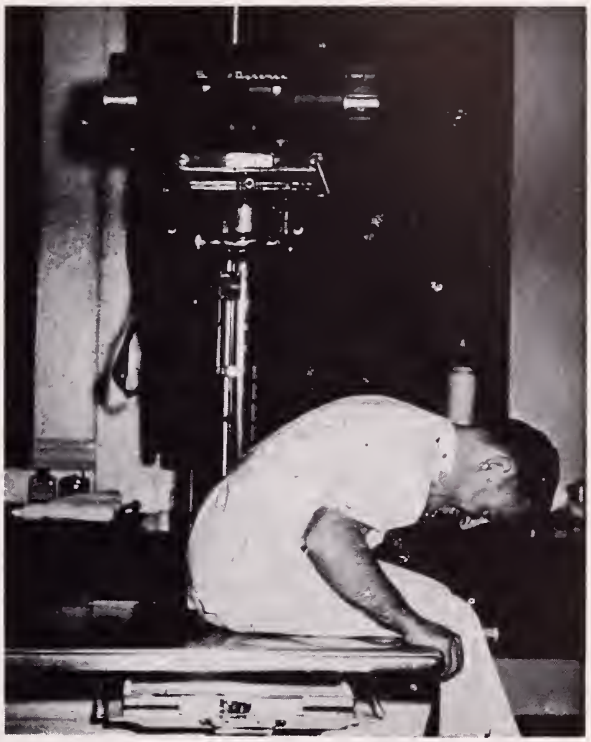


Figure 6

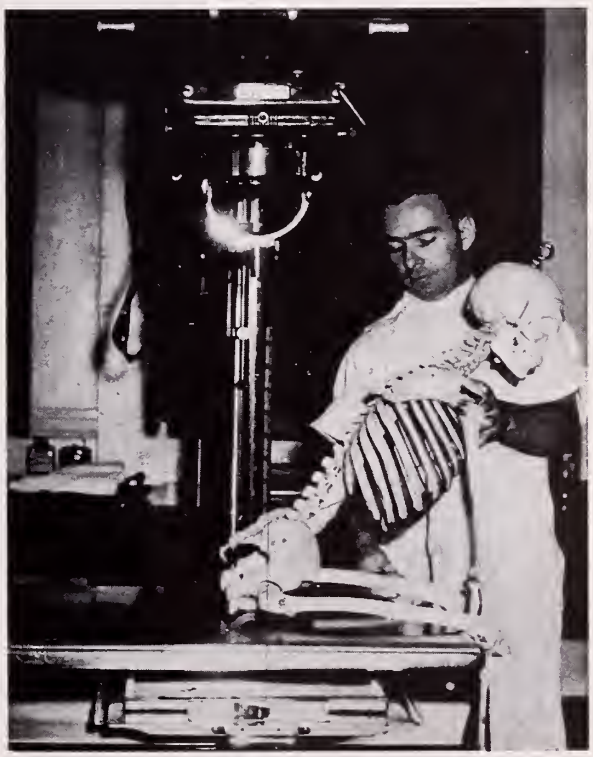


Figure 7

Significance of Aromatic Dental Cleansing Agents in the Pathogenesis of Pulmonary Neoplasm*

By B. A. D'Argent, M.D.,† *Philadelphia*

(This research has been aided by a grant from the Skytrail Cigarette Vending Foundation and also supported by assistance given by the All-Purpose Tissue Dispensors, Incorporated. Also based on an idea by J. B.)

Recent investigations have been conducted along many lines intended to provide an explanation for the increased incidence in pulmonary neoplasm. We, in our labyrinth laboratory, have been specially concerned with the effects of abnormal mouth and dental hygiene in the production of pulmonary neoplasm.

Our research dates to the neolithic age, at which time our investigators discovered that the caveman who had good teeth, had no pulmonary neoplasms. This is substantiated by specimens we have noted in both the paleolithic man in the Smithsonian basement and in the Wishtar Rat Caverns. With the introduction of various types of dentifrices, excluding soaps, we have noticed that there has been somewhat of an urgency in the character of response present in those pulmonary functions which are manifest in breathing, coughing, spitting, speaking, public speaking and expostulation. We have therefore noted that the introduction of dental cleansing agents of the aromatic variety might be contributory, if not positively, causative agents. On the contrary, dental floss has been completely cleared as a factor.

Castor Oil As Mouthwash

We have further investigated the use of castor oil as a mouth wash, which is a non-aromatic wash by contrast to aromatic mouth washes, and have noted that the castor oil will control all problems of mouth hygiene. It not only eliminates the use of harmful aromatic hydrocarbons in the various cavities, but also prohibits the necessity for coughing, since such reaction is disastrous in individuals who are running of necessity. This is known as the flux-type of mouthwash.

The idiosyncrasies which we have noted to be controlled by proper mouth wash are of sufficient importance, that we must report our statistical data, our source material and our investigations, so that the general public can be better misled.

Statistical Data

Data utilized in this study were obtained from careful culinary investigation accomplished at the various isolated Indian tribes in the Stenson Lake area. The Sheboygaga tribe was located in a preserved area southwest of Stenson's Lake. This tribe used only cigarettes. They never have used toothpaste, but have used artesian well water. The Obinjorol tribe, which was located north of Stenson's Lake were always using toothpaste, but did not use cigarettes. One of their essential staples is now being used for cooking a specially tasty dish known as "Teepee Stew."* Now there was a tribe of the Nobreeding Obinjeana which were on the south and flush away from the Sheboygaga tribe. The Obinjeanas were right in the middle of the volcanic lake where Stenson's Lake had been. It was necessary for them to be there because they used neither cigarettes nor aromatic hydrocarbons but only castor oil. The other tribe surrounding Stenson's Lake were the Overbred Isotonics who were close to the west. Their history indicated that they were always sitting on a keg of paste in the substantial subterranean caverns and adjacent to the green tobacco fields. This group consequently were always using tobacco and toothpaste but because they had six fingers on each hand (Dominant Gene was their chief) the prognothic maxillofacial angle was significantly altered to cause subtle though rapid loss of

†Satire by Julian A. Sterling, M.D., Philadelphia.

*Teepee for T.P. for toothpaste, expressed in sign language, of course.

teeth. As a result — they were not known to use toothpaste after the age of forty-one years. This is very significant. (Table 1) There was no increase in bronchiolar mitosis after the age of forty-one except for a mean deviation of 0.2[3] which is inconsequential and insignificant.

TABLE ONE

Incidence of Bronchiolar mitoses per one hundred cells as counted on the image-intensified radiofluorometer, allowing for nullification of background count by the expensive method of simultaneous scintiscanning.

AGE GROUP (years only)	Cigarettes Only (Sheboygaga)	Toothpaste Only (Obinjoral)	Cigarettes +Toothpaste (OVERBRED Isotonics)	Neither C nor T Obinjeanas)
10-30	16	15	22	28
30-50	36	41	47	32
50-70	38	64	48	—*
Average:	38	40	39	30

*None alive. All died: diarrhea.

Eskimaux Studied

There were a group of Eskimaux also included in this study who were eating and using only hemp cigars and dental floss, and they were the basic control for the entire study.

These records go back through several hundred medicine men and the preshrunk tribal records. These were emulsified from glaciers of the Ice Age, having been gleaned from periscopes of the N.O.B.M. class of Upton among the new atom Diesel submarines. These were found to be absolute zero.

The Uncle Remus method, using the tar and glue procedure was also applied in the evaluation of the tabulated statistics. The tar series is definitely separated from the glue series. These methods for aspiration of bronchiolar epithelium were first reported by J. and M. Remus, whose combined reports represent a most significant contribution. As we know, instillation of the 1% glue (levo rotatory) or the 0.005% tar (desoxy sublimate) by parabronchial effusion is rapidly expectorated on the cough plate whereupon after ultracentrifigation the midzone is infiltered to the polar aspect of a pig's eye. (Table 1)

Significant Results

Among our results were three significant ones, the graphs of which are attached. The first study indicates that the number of mitoses which were present per 1000 bronchioles, were much greater in those who used toothpaste only, as opposed to those who used only cigarettes. (Fig. 1 and Table 1)

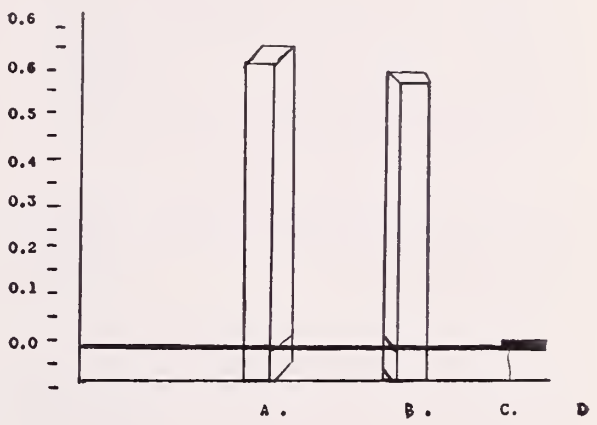


Figure 1. Bar graft study of appearance of seemingly significant statistical incidence of pleomorphic mitoses when found (A and B) and when completely absent (C and D).

There was noted also that there were an increasing number of cavities in those individuals who had square millometers of incisors (fig. 2) and who did not use castor oil, in all groups



Present **Absent**
(86%) **(274%)**

Figure 2. Comparison of rates of presence of mitoses to those cases wherein such mitoses were absent. Expressed in integers (incisors).

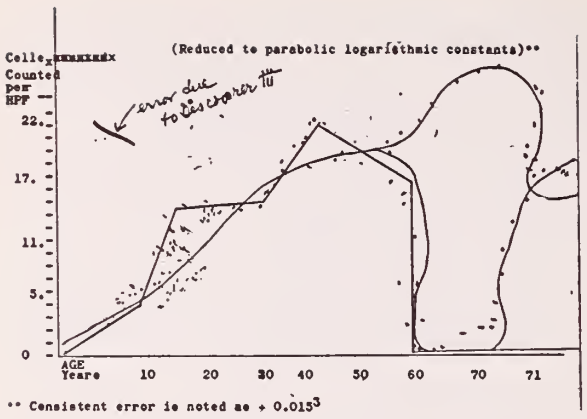


Figure 3. Scattergraph indicates levels of all cases with recognizable incisors (black line) as opposed to those with only superficial alveolar hyperplasia (black line).

except the fifty year old age group, and in this tribe that was studied, there were no fifty year olds, because they had all died of diarrhea. (fig. 3)

There was one other group in which the contrast of the toothpaste and the tooth powder, when used with the cigarettes and the cigars, were found to have a very satisfactory result, but these we willl report in a later, more significant communication becasue they are absolutely valueless.

Discussion

These results are all so perfectly obvious that no discussion will be needed.

Summary

It is felt—and sometimes computed as well as prosthetically well proven that the aromatic dental cleansing agents, which have recently been introduced for public consumption are contributory to the pathogenesis of pulmonary neoplasm, as anybody can plainly see from the result of this observation. It is also suspected, as a result of this study, that the use of detergents and anti-wetting agents may be valuable for chimney sweep's disease and enuresis but they will probably by dyschronous as relating to pulmonary neoplasm.

Conclusion

Aromatic dental cleansing agents may be productive of increasing bronchiolar mitoses. These may produce alveolar hyperplasia. Our studies indicate this. Castor oil is recommended for use as a dental cleaning agent because it inhibits pulmonary neoplasm.

(No patient survived the diarrhea to get cancer)

Bibliography:
None, 1950-1959.

Los Angeles Psychiatrist To Speak In Phoenix

"Day and Night Hospital — An Advance in the Management of Psychiatric Patients" is the topic of a talk to be given at Camelback Hospital in Phoenix, February 23, by Dr. John Gussen of Los Angeles.

Dr. Gussen will talk to the members of the Maricopa County Medical Society who have been invited to attend the regular Tuesday morning Staff Breakfast by Dr. Otto L. Bendheim, Medical Director of Camelback Hospital.

Dr. Gussen has served as Chief of the Day-Night Hospital, Langley Porter Neuropsychiatric Institute, San Francisco, and was Assistant Professor of Psychiatry at the University of California School of Medicine, San Francisco, before his appointment as Director of Psychiatry at Cedars of Lebanon Hospital in Los Angeles.

"Tranquilaxant" Topics

Painful skeletal muscle spasm relieved with TRANCOPAL: A new agent that relieves the pain and stiffness of skeletal muscle spasm and enables patients to return promptly to their usual activities has been described in recent reports by Lichtman,[1,2] DeNyse,[3] Ganz,[4] Mullin and Epifano,[5] and Shanaphy.[6] It is Trancopal, called a "tranquilaxant" because "it combines the properties of tranquilization and skeletal muscle relaxation with no concomitant change in normal consciousness."[6]

Clinical results: Trancopal produced satisfactory muscle relaxation in 817 of 879 patients studied by Lichtman.[2] The patients in this group suffered from low back pain (361 cases), stiff neck (128 cases), bursitis (177 cases), and other disorders associated with skeletal muscle spasm (213 cases).

DeNyse[3] found Trancopal "... was of great help" for patients with arthritis who were handicapped by stiffness and limitation of motion from muscle spasm. Ganz[4] reports that, on taking Trancopal, 20 of 29 patients with torticollis were "... considerably improved ..." or "... obtained very effective relief ..."

Mullin and Epifano[5] found Trancopal gave "... good to excellent relief ..." in all of 39 patients with skeletal muscle spasm accompanying injuries, bursitis, rheumatoid arthritis, osteoarthritis, and intervertebral disc syndrome.

Action of TRANCOPAL: "While the site of action of chlormezanone [Trancopal] has not been exactly determined, there is experimental evidence that the drug depresses activity in the subcortical centers of polysynaptic nerve reflexes. Inhibition of these centers when they are hyperactive is thought to cause a relaxation of skeletal muscle and to induce a general tranquilizing effect."[6]

For dysmenorrhea and anxiety: The enthusiasm for Trancopal is shared by investigators who have studied its effects in patients with dysmenorrhea or in anxiety and tension states. Their findings will be reported in future "TRANQUILAXANT" TOPICS.

Clinical Results with TRANCOPAL in Musculoskeletal Disorders

Disorder	*Total no. of patients*	*Total no. of patients benefited*
Low back pain, stiff neck, bursitis, rheumatoid arthritis, osteoarthritis, injuries, postoperative muscle spasm and other disorders	879	817
Comment: "Chlormethazanone [Trancopal] not only relieved painful muscle spasm, but allowed the patients to resume their normal activities with no interference in performance of either manual or intellectual tasks." (Lichtman[1])		
Arthritis	31	25
Comment: "The patients were able to move with ease and could perform their daily tasks with more comfort." (DeNyse[3])		
Torticollis	29	20
Comment: "The patients helped by the drug were able to carry the head in the normal position without pain." (Ganz[4])		
Skeletal muscle spasm associated with injuries, bursitis, rheumatoid arthritis, osteoarthritis, and intervertebral disc syndrome	39	39
Comment: "... a very effective skeletal muscle spasmolytic." (Mullin and Epifano[5])		

Supplied in two strengths: Trancopal Caplets®, 100 mg. (peach colored, scored), bottles of 100; Trancopal Caplets, 200 mg. (green colored, scored), bottles of 100.

References: **1.** Lichtman, A. L.: *Kentucky Acad. Gen. Pract. J.* 4:28, Oct., 1958. **2.** Lichtman, A. L.: Scientific Exhibit, meeting of the International College of Surgeons, Miami Beach, Fla., Jan. 4-7, 1959. **3.** DeNyse, D. L.: *M. Times* 87:1512, Nov., 1959. **4.** Ganz, S. E.: *J. Indiana M. A.* 52:1134, July, 1959. **5.** Mullin, W. G., and Epifano, L.: *Am. Pract. & Digest Treat.* 10:1743, Oct., 1959. **6.** Shanaphy, J. F.: *Current Therap. Res.* 1:59, Oct., 1959.

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CPC

Clinical Pathological Conference

R. E. Thomason General Hospital, El Paso

November 19, 1959

Case No. 1334

Frederick P. Bornstein, M.D., *Editor*

Presentation of case by Donald Rathbun, M.D.

History: Dr. Nathan Kleban:

Because of a cough, for an unrecorded duration, a 54-year-old Latin-American man went to the City-County Health Department for a miniature chest film. This was abnormal, and he was referred to the clinic of this hospital for a six foot film, which was reported as pneumonitis and pleurisy in the left lower lobe and left ventricular hypertrophy.

Treatment with a combination penicillin-dihydrostreptomycin preparation, tetracycline, chloramphenicol, sulfa and anti-tussive drugs was followed by X-ray reported as demonstrating partial resolution of the pneumonitis. Cough persisted. Hemoptysis occurred two months after he was first seen in the out-patient department. Exertional dyspnea appeared. Accentuation of the left hilum was reported on X-ray.

Right Chest Pain

Right chest pain brought the patient to the emergency room. He was admitted to the hospital four and a half months after he first appeared in the clinic. X-ray examination of the chest demonstrated atelectasis of the left lung. No obstructing lesion was seen during bronchoscopy, although subsequent laminographic study reported complete obstruction of the left main stem bronchus.

When left thoracotomy was done a large, hard mass involving the left lower lobe and the lower part of the left upper lobe was encountered. The lesion was judged to be inoperable. A hilar lymph node was removed for biopsy. Pathological diagnosis was "necrotic material." The patient was discharged to receive palliative irradiation therapy.

Pain in the arms, chest, abdomen and generalized brought the patient back to the hospital seven months after he was first seen.

No additional history was recorded.

Physical Examination:

T. 99 (R) P. 90 R. 20 B. P. 120/70

Pupils were dilated. Neck was equivocally rigid. Rhonchi were heard at the lung bases. A systolic murmur was heard at the apex. Abdominal reflexes were absent or equivocal.

Hospital Course:

Three hours after admission the patient had a grand mal convulsive seizure. Eyes were deviated to the left. Later he complained of "terrific headache," which continued for several days. Bilateral plantar extensor reflexes were elicited. Spinal paracentesis two days later yielded bloody fluid. Pressure was not recorded. Phenobarbital was prescribed during the remainder of the hospital stay. Right facial paralysis with inability to close the right eye was noted four days after the convulsion. Chloramphenicol was given because of fever. Stupor and coma preceded death on the ninth hospital day.

Laboratory Findings:

Blood counts: 6-16-59—Hb. 14.2 gms., Ht. 48 vol. %, WBC 11,600, Stabs. 2, Segs. 82, Lymphs. 14, Monos. 1, Eosin. 1. 7-14-59—Hb. 13.9 gms., Ht. 40 vol. %, WBC 11,600, Segs. 80, Lymphs. 20. 9-11-59—Hb. 13.9 gm., Ht. 44 vol. %, WBC 19,600, Stabs. 5, Segs. 81, Lymphs. 14.

Urinalyses: 6-17-59—Amber, hazy, acid, S.G. 1.023, Albumin trace, Sugar neg., 2-3 WBC/hpf, 6-8 RBC/hpf, Occ. sq. ep. cells. 7-14-59—Yellow, turbid, acid, S.G. 1.008, sugar and albumin negative, rare WBC, rare RBC, occ. sq. ep. cell. 9-11-59—Yellow, cloudy, alkaline, S.G. 1.003, al-

bumin 2+, sugar negative, 40-60 WBC/hpf, 10-15 RBC/hpf, few sq. ep. cells, many bacilli. 9-15-59—Amber, turbid, acid, S.G. QNS, albumin 2+, sugar negative, WBC abundant, RBC 15-20/hpf, Abundant bacteria.

Chemistry: 6-17-59—Glucose—118. Urea Nitrogen, 13. 6-23-59—Van den Bergh Direct—.077. Indirect—.290. 9-10-59—Glucose—217. Urea Nitrogen—13.5.

Throat culture—6-18-59—Staph., Neiseria and pneumococcus. Sens.: Kana., Erithro., Tetrac.

Serology—9-18-59—negative.

Spinal fluid—9-11-59—gross blood.

Urine culture and sensitivity—9-14-59—Coliforms—Kantrex, Neo., Furadantin IV, altafur.

Blood culture—9-14-59—no growth.

X-rays: Chest—6-16-59—Re-examination of the chest and comparison with previous study now reveals the right lung to be hyper-ventilated. There is a shift of the mediastinum to the left with accompanying complete collapse of the left lung field. There is marked displacement of the trachea to the left with accompanying elevation of the left hemidiaphragm. A superimposed pneumonitis cannot be entirely excluded. Conclusion: Complete atelectasis of left lung. Bronchoscopy recommended to exclude a bronchogenic neoplasm.

Chest—6-24-59—Bucky views of the chest reveal an area of obstruction approximately one cm. from the carina of the left main stem bronchus. Conclusion: Findings consistent with obstructing left main stem bronchus.

9-10-59—Re-examination of the chest and comparison with previous study now reveals complete expansion of the left lung. The previously described density in the left mid lung field is still apparent. There is obscuration of the left costophrenic sulcus most probably secondary to accompanying thickened pleura. The right lung field reveals no change. Conclusion: Satisfactory postoperative progress.

9-10-59—Skull—Conclusion: Normal skull.

Clinical Discussion: Dr. Donald Rathbun:

This patient was first seen in February of this year in the out-patient clinic. A chest X-ray showed pleurisy in the left lower lobe, and left ventricular hypertrophy. He was treated apparently as an out-patient and followed by X-rays, which showed partial resolution. He had hemoptysis two months after he was first seen. No diagnosis was given.

He was treated with shotgun medication. In the sputa no acid-fast organisms were seen. Because of the hemoptysis we have to consider tuberculosis as a possibility. At any rate, apparently four or five months later he returned to the out-patient clinic with right chest pain. This is peculiar because his left chest was involved previously. On X-ray he had atelectasis of the left lung, and apparently there was controversy as to whether he had complete bronchial obstruction.

A thoracotomy gave the impression of an inoperable lesion, presumably malignant. A lymph node only showed necrotic material. I presume the patient had a malignant lesion since he was given irradiation therapy. He came back with pain in his arms, chest, abdomen and so forth, seven months after his primary lesion was seen. Temperature was normal; his pulse was a little high; blood pressure was normal. His pupils were said to be dilated; his neck was possibly rigid; rhonchi and abdominal reflexes were absent. I am a little hazy here on exactly why he was admitted.

Generalized Convulsion

Three hours after he was admitted he had a generalized convulsion and his eyes were noted to be deviated to the left which would suggest a left hemispheric lesion of some sort. He had a terriffic headache which continued for several days. He had bilateral Babinskis. I don't know why a spinal tap was not done immediately. At any rate two days later a spinal tap was done and reported as bloody, and this is the only laboratory report we have.

I would like to make the point that any time you have a bloody spinal fluid the individual who does the spinal tap ought to spin down the fluid immediately to find out whether it is xanthochromic. This gives us an idea as to whether the bleeding is acute or whether it has been there for some time.

If the fluid is clear on top that suggests acute hemorrhage in the past few hours. An examina-

tion of the red cells would then give us an idea as to whether this was an acute occurrence within the past few hours, or older. His spinal fluid pressure was not recorded. Unfortunately, because the spinal fluid was bloody, they did no laboratory studies on it.

I think it is important, even when you have a bloody spinal fluid, to request, and this is our fault many times for not requesting, a complete blood count. I know in our hospital we would order a white count, which would be done but not count the red cells. Maybe 50 or 60 white cells were counted and we wouldn't know whether they were due to hemorrhage or whether due to an active inflammatory process.

White Cells

From a complete blood count one can calculate how many white cells there should be in relation to the number of red cells on the basis of peripheral counts. Thus one gets some idea at least, not accurate, as to whether there are a massive number of white cells in his spinal fluid. This would indicate a meningitis or brain abscess which was communicating with the sub-arachnoid space. Or this perhaps represents the usual number of red and white cells from the blood. The protein can also be done in spite of the blood, and you can get some idea as to whether it is due to the blood, again on the basis of the number of red cells that were there. But this was not done so tihs doesn't help us in the diagnosis of what happened in the terminal episode. Following a convulsion he apparently had a right facial paralysis. This would corroborate our feeling that this was a left hemispheric lesion. I think, on the basis of looking at the whole picture, even if there was carcinatous disease, there was also a massive amount of pulmonary infection.

Embolic Phenomenon

From this the patient could have developed an embolic phenomenon to his brain, producing a brain abscess secondary to a lung abscess. To corroborate this, on the last admission his peripheral white count was 29,000, and a day later was 19,000 and four days later, on the 15th, it was 9,000. This would be a little against a brain abscess but the fact that his temperature was normal, the fact that he had gone on this length of time presumably asymptomatic, would go along with a brain abscess. The fact that he had a bloody spinal fluid would be a little bit against a brain abscess as such, but not completely.

He could have had an acute embolic phenomenon from his lung, either a metastatic malignant or a metastatic infectious one. About fifteen per cent of those embolic phenomena do have hemorrhage, or blood in the spinal fluid. The fact that he had bloody spinal fluid doesn't necessarily mean that he had to have a vascular accident per se, but it could have been associated with an embolic phenomenon.

You have seen all the urine specimens. He had a fairly large number of white cells in his urine all the way through. I don't see exactly how this relates to the cerebral disease. We would like to get the radiologist, before we stick our necks out completely.

X-Ray Discussion; Dr. Vincent Ravel:

We have been examining this patient for well over a year. He kept having episodes of pneumonitis which refused to clear up completely. This should make one suspicious of a secondary lesion involving the lung. In the ordinary course a pneumonia with the proper management usually clears up. When a patient suffers from recurrent pneumonitis, then our suspicions should be directed towards other underlying mechanisms or secondary involvement. Of course that is what happened here.

The first film shows a relatively healthy chest which was taken at Providence a year or so before he first started coming out here. In this view we see a pneumonitis at the left base that didn't resolve as nicely as we would like to have seen it. I am a little at a loss to understand why the bronchoscopist was unable to find an area of obstruction on this film here. It shows a complete shift of the mediastinum and narrowing of the interspaces. The trachea is displaced; the left hemidiaphragm is elevated; and these are all classic signs of a complete atelectasis. We took laminagrams. I think you can see the carina; there is an occlusion about one cm. from the carina. Following operation there was a partial collapse of the remaining left lung. Then there was a drainage

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*Thompson, R. E., and Hecht, R. A.: Am. J. Clin. Nutrition 7:311-317 (May-June) 1959.

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tube in the left hemithorax, and then finally we see the expansion of the lung and the absence of pneumothorax.

The skull films revealed nothing on the surveys that would indicate any increased intracranial pressure or possible hematoma. The pineal was not visualized, and of course that would have given us a great deal of help if we could identify it and show some displacement.

But in any event we have a chronic recurrent pneumonitis, followed by atelectasis and collapse of the left lung with superimposed secondary infection.

Dr. Kleban:

Did you say something about the cardiac silhouette?

Dr. Ravel:

The prominence of the left ventricle certainly looks like it's a concentric hypertrophy. The evaluation of the cardiac silhouette frequently depends upon the phase of respiration, whether or not the film was taken in the systolic or diastolic phase of the cardiac contraction. There is a moderate amount of variation that could be considered within normal, and it is a little difficult to evaluate. We prefer to have several views including the obliques to try and evaluate the possibility of chamber enlargement.

Dr. Kleban:

Do you have any idea why the first film at Providence was made?

Dr. Ravel:

Yes, I imagine he was admitted for some sort of upper respiratory infection.

Dr. Kleban:

Retrospectively, do you now see anything in the first X-ray which looks like a lesion that could have been attacked while the man was still curable?

Dr. Ravel:

Well, I don't see anything in the first film that would make me suspicious of a bronchogenic neoplasm. There are no localized areas of emphysema, which sometimes is an early clue.

Dr. E. S. Crossett:

You say you had repeated X-rays on this patient, that it was a suspicious, recurrent pneumonitis. These internes have to depend on you for radiographic interpretation on these things, and I wondered if you ever reported the fact that this was recurrent pneumonitis.

Dr. Ravel:

Yes, we mentioned that a bronchogenic neoplasm could not be excluded. I have the report here. The first out-patient X-ray was in February. In March we mentioned partial resolution and then in April again there was no significant change, and then in May we said there is an accentuation of the left hilum which may be due to glandular enlargement. However, neoplasm cannot be excluded and further evaluation is recommended.

Dr. Kleban:

Then there were two months showing pneumonitis not resolving?

Dr. Ravel:

Yes. Here again we in the X-ray department are confronted with films that have no history. We have no clinical findings, the charts are frequently incomplete, we don't know what the clinician is looking for. This presents a difficult problem, to look at films without any history or knowing what the clinician is interested in. We have to do the best we can with markedly limited information, and I guess we have to accept that responsibility. After seeing three examinations with no real improvement, we suggested that there was the possibility of some other underlying mechanism.

Question:

When did they finally decide to operate?

Dr. Ravel:

Even after the patient was bronchoscoped they said there was no evidence of an obstructive lesion.

Dr. Crossett:

In discussing this problem of pneumonitis that hadn't cleared over a three months period, it brings up the question of how long you're going

to wait or watch a pneumonitis before you do something about it. A radiologist has to make an interpretation of these films without a clinical history. This brings up the question as to whether or not he should make a definite radiographic interpretation such as pneumonia, pneumonitis, tumor, coccidioidomycosis or anything else, without the clinical history.

I believe that you're going to have to know at least the age of the patient before you can start to interpret a film. If this were in a young person then I think you would be justified in assuming that it was a pneumonitis over a period of three or four months. In a 54-year-old man whose pneumonia lasts for more than three or four weeks, you cannot assume, without additional information, that this is a pneumonitis and not a tumor.

I believe in the cancer age group you should not watch a film longer than two or three weeks when it shows a process in the lung, if you don't have a definite diagnosis. In interpreting films you should have the previous films and if possible a clinical history. Without that I don't see how you can decide that it is pneumonitis or anything else. One of two things should be done, either a differential diagnosis given to the internes or else a request for a clinical history, if they are going to interpret the films.

Pneumonitis

At any rate, what happened with this man was he came in in January or February and as I recall had a film with the pneumonitis and finally in June he was admitted to the hospital, May or June, a few months later, he was bronchoscoped the first time. I did not bronchoscope him but it was done under local and he was not cooperative so that a good look at the left main stem bronchus was not obtained. As I recall the statement was that nothing was seen on the bronchogram. One reason why nothing was seen was because they couldn't get a good look at the left main bronchus.

The person who bronchoscoped him knew that. Therefore he was brought into the hospital because of an obvious obstruction of the bronchus. He was put to sleep and bronchoscoped and a lesion was seen in the left main bronchus which did not extend up to the carina and did not appear to be inoperable from the bronchoscopic point of view. On operation a mass was found in the region of the left hilum which completely encased the entire hilum and which appeared to be a carcinoma.

A lymph node was taken from an adjacent area because the mass encompassed everything. Just to cut into a mass and biopsy it is not always a good idea, because you are liable to cut into the pulmonary artery, and then you have to sew it up in the midst of carcinomatous tissue. At any rate the lymph node turned out to be a necrotic node.

Dr. Ravel:

I agree with you that the radiologist is taking a lot of responsibility in evaluating these things and we should give a differential diagnosis. However, there is one other point; it doesn't do the clinician much good for the radiologist to say, "Well, this could be inflammatory or it could be neoplastic." We have to give an opinion as to what these changes on the film look like to us. You knew it was either inflammatory or neoplastic or congenital before you requested X-rays. As a personal opinion I feel that we have to try and express an opinion, and if we are wrong we are wrong, but I think we shouldn't wait three months to decide on a resolving pneumonitis.

I think that is too long. Most pneumonias will clear up within eight or ten days, or start showing signs of resolution. We have seen viral lesions that will persist for six weeks. Clinically the patient is all right, although you see all sorts of changes in the chest. Sometimes when they are the sickest you may see nothing in the chest. When they are running fever and coughing you may get a chest film that looks like a perfectly healthy chest. Then they clear up and then you start seeing changes in the chest after their crisis, so to speak.

Dr. Rathbun:

First, Dr. Crossett, may I ask what was the date he was operated on?

Dr. Crossett:

As I recall, it was June.

Dr. Rathbun:

June. So his death then was three or four months after he was operated on. I would think

that on the basis of this that the two most likely things are that he had metastatic carcinoma to his brain or a brain abscess, metastatic from his lung disease. I would put the infectious process, the brain abscess first. I think it is statistically more probable. Also three months is too short a time for a metastatic lesion to grow to the size and proportions it must have to kill this man as quickly as it did. That is not an absolute of course. We know that metastatic lesions can grow rapidly, depending on where they are and how critical an area they are in; but I think he had a brain abscess resulting from an embolic phenomenon from the chest.

I think that we also have to consider the possibility that he had a spontaneous sub-arachnoid hemorrhage into his left hemisphere, probably in his middle cerebral artery, unrelated to his chest pathology. Also we must consider the possibility that he could have had a brain tumor in that area, again unrelated to his chest pathology, because we are finding more and more people with more than one malignant phenomenon as we get into working up these people more adequately. So that is my differential diagnosis, brain abscess as the terminal episode.

Dr. Saul Appel:

I would like to comment on the problem, who is responsible for interpreting X-rays? This affects not only X-rays but electrocardiograms. The request blanks for these procedures provide a space for clinical history, but in a busy interneship these requests are frequently sent out without filling in the blank properly. I leave the question open whether it is the responsibility of the radiologist to demand more information or whether this should be entirely the responsibility of the clinical department. Be this as it may, in this particular case the radiologist failed to receive the information which he needed to properly evaluate the films. Perhaps in going over 99 out of 100 cases the information wouldn't be necessary but at least it would be available.

As far as Dr. Rathbun's statement about this being more likely an abscess than a brain tumor, I have seen several patients in whom the cerebral manifestations of carcinoma of the lung were the first clinical manifestations of disease in the patient; and I have even seen patients who were operated on for primary brain tumor in whom the primary site was in the bronchus. The initial X-rays had been read by responsible radiologists who hadn't paid any attention to the small lesion that could be seen on retrospect. On the basis of statistics, of course, Dr. Rathbun is correct; it is more likely that the patient had a brain abscess secondary to a lung abscess. Delay of the cerebral manifestations does not indicate that the patient did not have a primary malignancy of the lung with metastatis to the brain.

Dr. Bornstein:

I have heard "on the basis of statistics" once too often here. I want to warn the internes. Every patient is a statistic of one, and you can't make diagnoses from statistics.

Dr. W. P. Stratemeyer:

I just have one thing to say which is just directed mostly to the house staff. When you do a spinal tap, always do a pressure. I know we all slip up once in awhile, but if you just get in the habit of always taking a pressure it will be better in the long run. You will pick up something you don't expect, sometimes.

Dr. Pablo Ayub:

I would like to focus attention on the urinary findings, which show some red blood cells and white blood cells on every one of the samples that were taken. This would appear to be due to an embolic phenomena, most likely with bacteremia. The only other possibility, which is a long shot, is it is possible to have a dissecting aneurysm which gives the neurological findings as well as abdominal and thoracic findings.

Clinical Diagnosis. Bronchogenic carcinoma

Dr. Rathbun's Diagnoses:

1. Brain abscess from lung abscess due to bronchogenic carcinoma.
2. Possible independent ruptured aneurysm of circle of Willis.

Pathological Diagnoses:

1. Sub-arachnoid hemorrhage due to ruptured aneurysm of circle of Willis.

2. Metastatic squamous cell carcinoma, left occipital lobe.

3. Radiation lipoid pneumonia, left lung, with small clusters of tumor cells remaining (carcinoma, left lung).

Pathological Discussion—Dr. Bornstein:

The essential findings were in the head; and I am going to start, therefore, with the findings in the head. The primary finding was unrelated to the old disease, namely, a sub-arachnoid hemorrhage, rather anteriorly. This, however, is only part of the story. There was, in the left parietal lobe, a small grayish-white, gritty nodule. On microscopic examination the artery showed the typical thinning out of the wall and loss of elastic tissue which is characteristic of the congenital aneurysm. The section from the nodule in the brain showed large, anaplastic cells which I accept as metastatic carcinoma.

We then began a careful gross search for the carcinoma, which on operating was supposed to be a large mass in the left lung. All I could find in the left lung was an open bronchus and a chronic indurated pneumonitis with much necrosis, and in the necrotic tissue a very few small tumor cells remained. Everything else was chronic pneumonitis. So as far as the local carcinoma was concerned, the irradiation treatment had a very, very good effect. We have then a case here with two independent diseases, a bronchogenic carcinoma, almost completely cured by irradiation, a small metastatic lesion in the brain, and a congenital aneurysm of the circle of Willis which ruptured and killed the patient.

Dr. Ayub:

Was there anything in the kidneys?

Dr. Bornstein:

There was nothing much in the kidneys. I actually showed the case for two reasons; especially to show how much can be accomplished by therapeutic radiation — I would not have believed it if it hadn't been a well documented, surgically proven large tumor mass which for all visible purposes had disappeared. Unfortunately the man had a brain metastasis which probably would have finished him anyway.

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Brit. Med. J. II:969-980 (November 14) 1959
Upjohn Abstract, January, 1960

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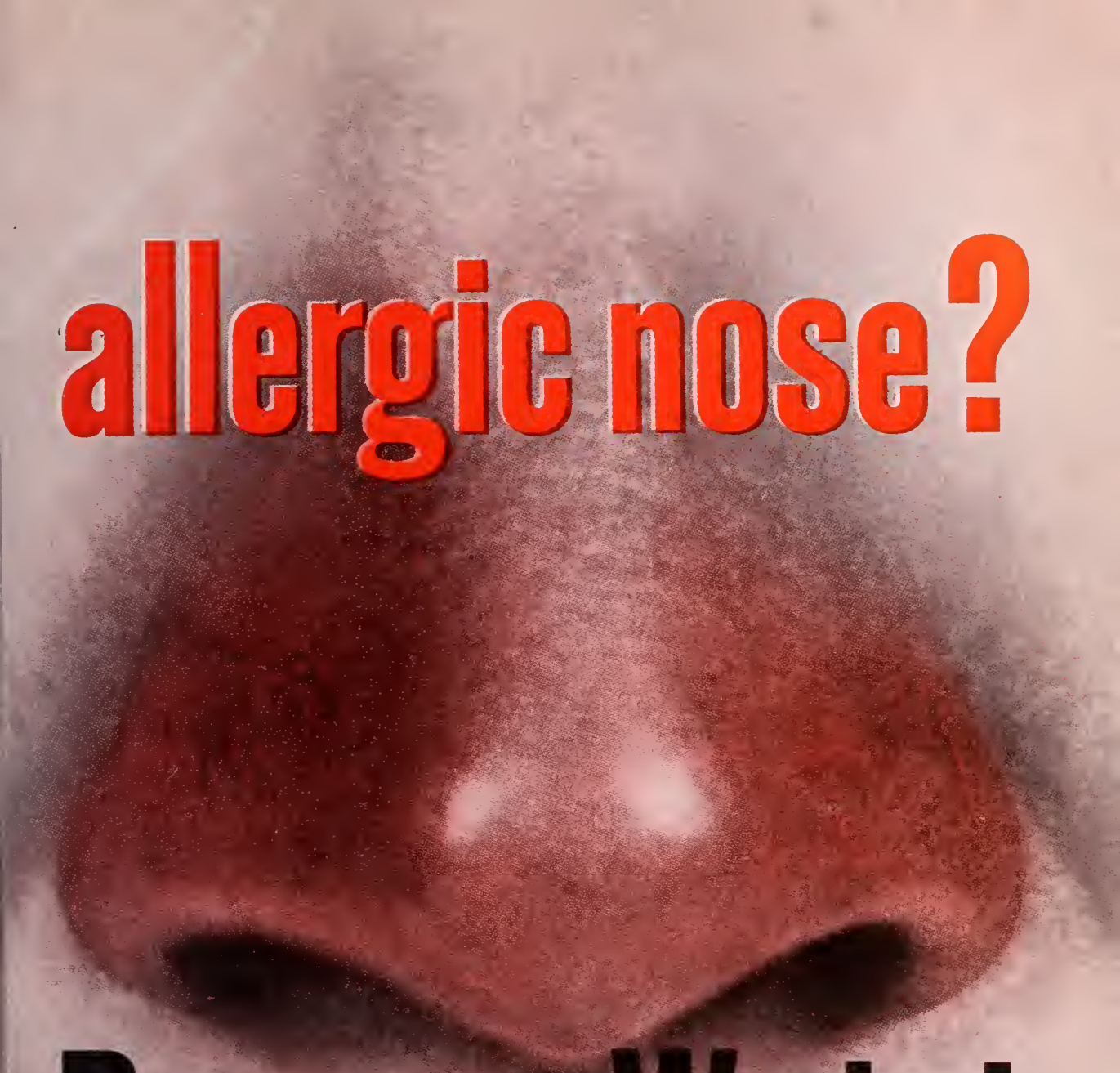
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2. Rinehart, R.E., and Marcus, H.: Incidence of Amebiasis in Healthy Individuals, Clinic Patients and Those with Rheumatoid Arthritis, Northwest Med., *54*:708 (July, 1955).

3. Webster, B.H.: Amebiasis, a Disease of Multiple Manifestations, Am. Pract. and Dig. of Treat. *9*:897 (June, 1958).

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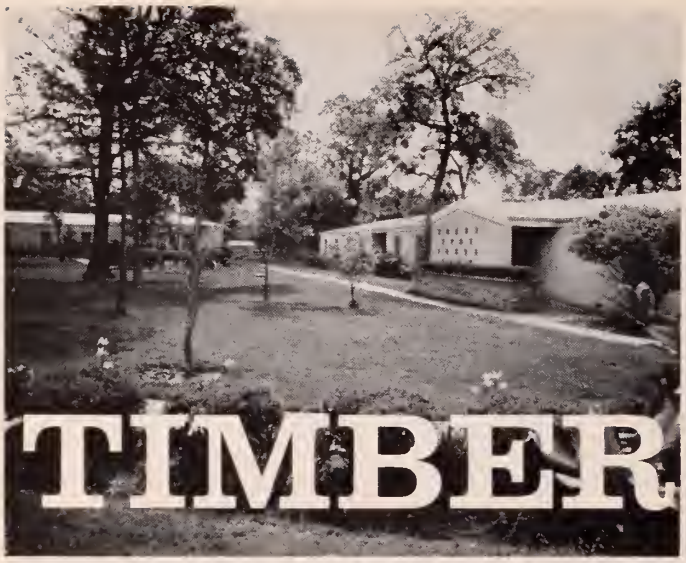
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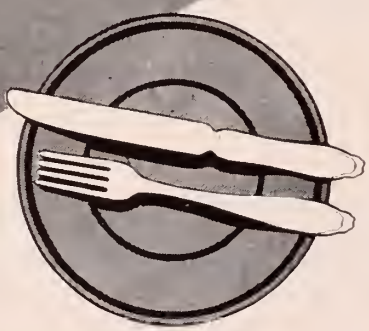
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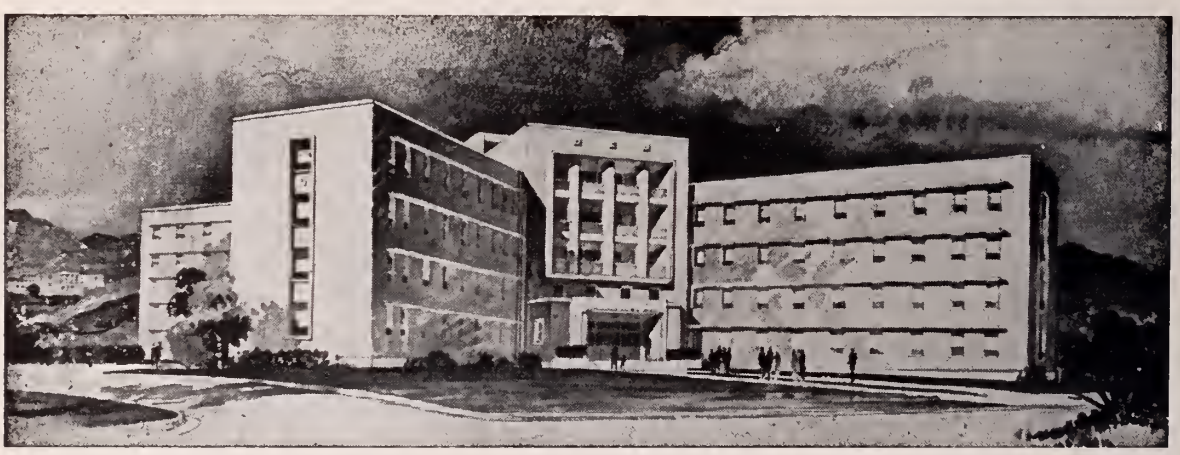
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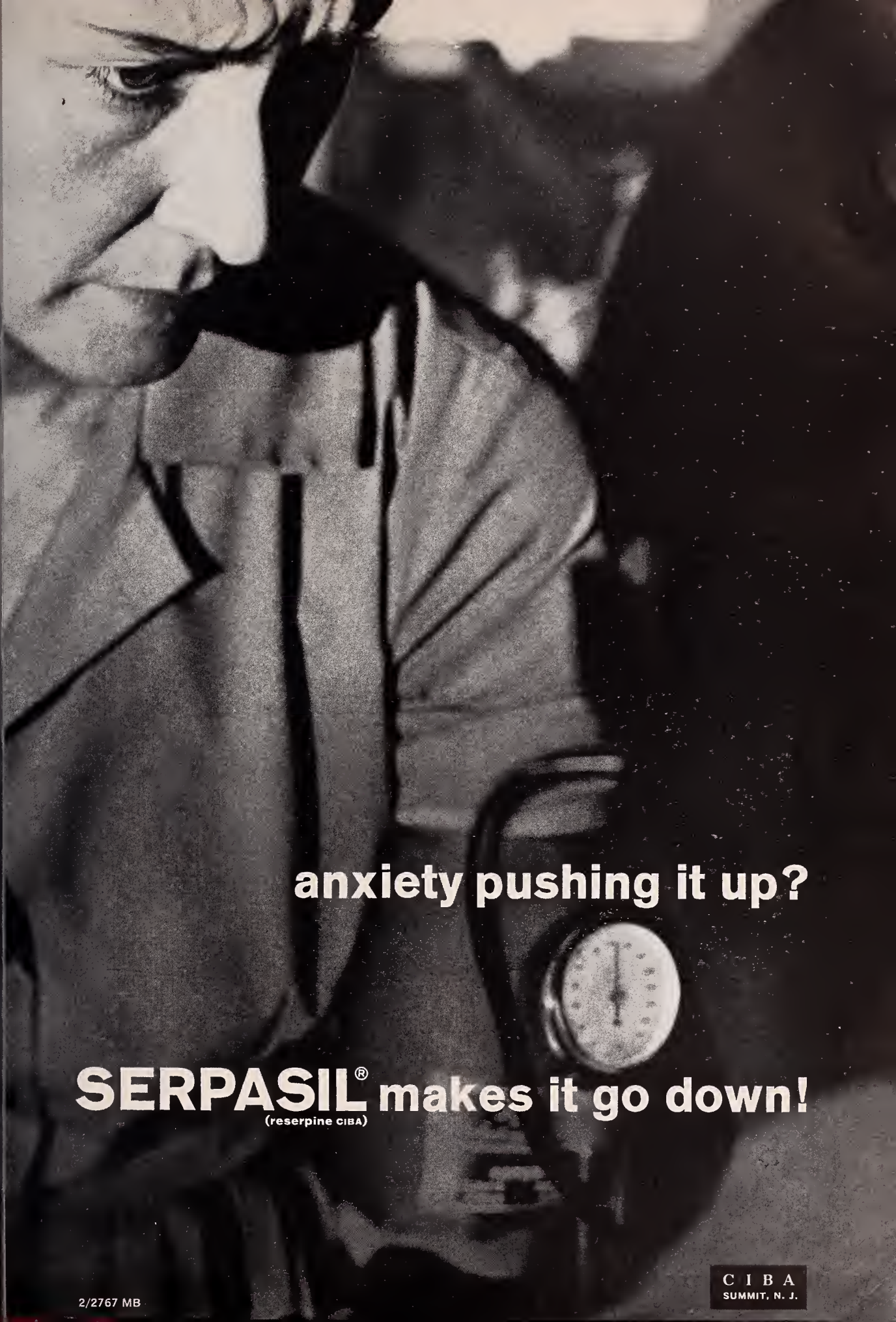
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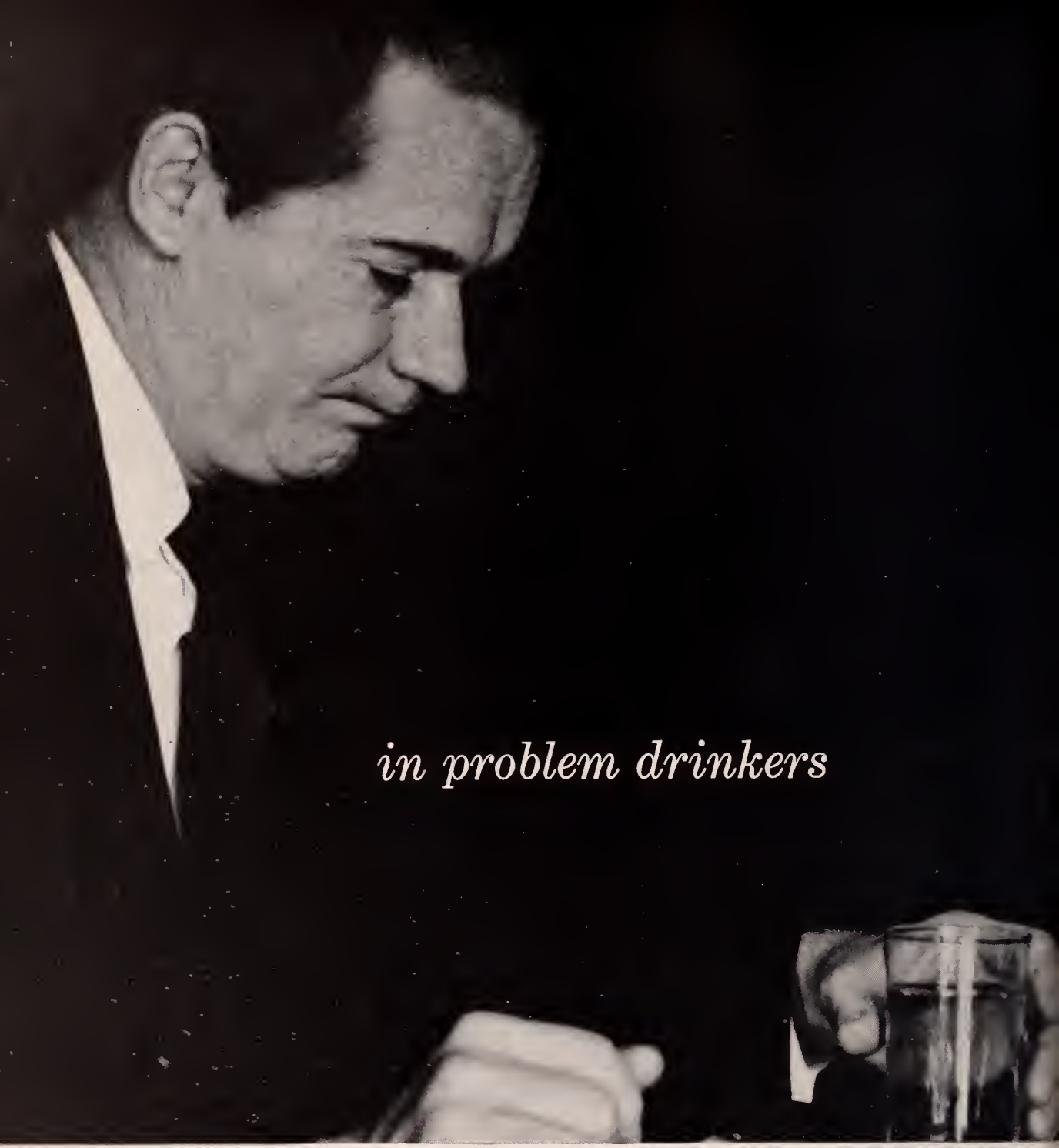
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1. Cook, J.E., Briggs, G.W., and Hindley, F.W.: Chronic Amebiasis and the Need for a Diagnostic Profile, Am. Pract. and Dig. of Treat. *6*:1821 (Dec., 1955).

2. Rinehart, R.E., and Marcus, H.: Incidence of Amebiasis in Healthy Individuals, Clinic Patients and Those with Rheumatoid Arthritis, Northwest Med., *54*:708 (July, 1955).

3. Webster, B.H.: Amebiasis, a Disease of Multiple Manifestations, Am. Pract. and Dig. of Treat. *9*:897 (June, 1958).

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Coming Meetings

Medicine and Surgery Symposium, Hilton Hotel, El Paso, March 12, 1960, sponsored by El Paso County Medical Society and Lederle Laboratories.

American College of Surgeons, Sectional Meeting, The Broadmoore Hotel, Colorado Springs, March 21-23, 1960.

United States - Mexico Border Public Health Association, Annual Meeting, Hermosillo, Sonora, Mexico, April 4-8, 1960.

Texas Orthopaedic Association, Annual Meeting, Hilton Hotel, Fort Worth, April 11, 1960.

Arizona Medical Association, 69th Annual Meeting, Safari Hotel, Scottsdale, Arizona, May 4-7, 1960.

New Mexico Medical Society, Annual Meeting, Western Skies Hotel, Albuquerque, May 11-13, 1960.

Postgraduate Course, Dermatology for General Practitioners, University of Colorado Medical Center, Denver, July 14-16, 1960.

Postgraduate Medical Assembly of South Texas, Shamrock Hilton, Houston, July 18-20, 1960.

Southwestern Medical Association, 42nd Annual Meeting, Hotel Hilton, El Paso, Oct. 20-22, 1960.

Southwest Obstetrical and Gynecological Society, Annual Meeting, Riviera Hotel, Las Vegas, Nev., Nov. 7-8, 1960.



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References: 1. Cronk, G. A.; Naumann, D. E., and Casson, K.: Antibiotics Annual 1957-1958, New York, Medical Encyclopedia, Inc., 1958, p. 397. 2. Childs, A. J.: Brit. M. J. *1*:660 (Mar. 24) 1956. 3. Newcomer, V. D.; Wright, E. T., and Sternberg, T. R.: Antibiotics Annual 1954-1955, New York, Medical Encyclopedia, Inc., 1955, p. 686.

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SOUTHWESTERN MEDICINE

VOL. XLI, NO. 3 MARCH, 1960

Young Men of Medicine

By Russell L. Deter, M.D., *El Paso*

President, Southwestern Medical Association

NOTE: Dr. Deter will discuss medicine's responsibility to the medical student, intern and resident — and the young doctor starting out in practice — in next month's issue.

EDITOR



Dr. Deter

The most exciting thing in medicine today is, as a group, the young men of medicine. Who are the young men of medicine? There are four categories:

1. The high school student who wants to study medicine.

2. The pre-medical student in college.

3. The medical student, intern and resident.

4. The young doctor beginning his practice of medicine.

Let us take these in order: First, the high school student who wants to study medicine. It is at this level that all of us, regardless of length of time in the practice of medicine, must exercise our utmost to encourage bright young minds to become interested in the field of medicine, impress them with the variety which exists, and the lack of monotony which is present in the practice of medicine, impress on them that the only security you can get is what you work for, and earn, impress on them that when you get a bouquet from "Uncle Sam" the flowers are always gathered in your front yard!

As Secretary of the Treasury Anderson stated in a letter to a young friend: "I would give you only one word of caution. When a boy is possessed of great abilities, as I think you are, he owes, in my judgment, much more to the world than those of lesser ability. This means an obligation to study, to learn, to think soundly and wisely, to be tolerant and understanding of others, and to maintain a sense of humor and patience. The way to success for anyone is never very easy, it comes from long hours of hard work that the rest of the world will little note nor long remember. I am sure that you are probably aware of these things already, but I know that I keep reminding myself that they are part of life's essentials."

Desire

Look for honesty, integrity and inquisitive mind — *desire*. One could write an entire treatise on the one word. You have got to *want to* to succeed. The same is true now as it was one hundred years ago.

2. **The college student.** The job here is much the same, but if you have done your job well at the high school level, here it would be much simpler. Here your job is one of advising him on how to prepare himself for medical school. Impress upon him the importance of being a well educated, well rounded citizen of his community. Also, that it is at the college level that he must

THE PRESIDENT'S PAGE

learn something about city, county, state and Federal government and his responsible place in it. That, as a physician, he must not only treat the physical ills of his community, but the social ills also. He must be impressed that a great amount of his time will be taken from making a living to participating in community activities. That he should select projects close to his heart and interest, and back them financially as well as physically — such as the whole gamut of youth programs — YMCA, Boy Scouts — even the care of the indigent can come under this heading.

They *do not know* these things, coming into medicine stone cold. How much easier it would be to interest doctors as a whole, if all of them could have been so prepared as they come along. Impress upon them the importance of knowing the English language, public speaking, writing, the humanities, philosophy, sociology, government, music appreciation, art, ad infinitum. Preparation for medical school does not involve taking courses that will be repeated in greater detail in medical school. One only wastes that time that could be used to greater advantage in taking those courses for which there is not sufficient time in medical school.

Through all of this, and at all levels, do not leave out religion. There is nothing that gives a man humility, no matter what his success, like being close to God.

Youth is such a wonderful age. They have never been able to realize that they are on the brink of disaster, as the gloom seekers would want them to believe. Because of this wonderful endowment of youth, each generation succeeds where the last one failed.

AT PECOS MEETING—Participating in the District One meeting of the Texas Medical Association in Pecos, Texas, February 5, 1960, were, left to right, Dr. Charles Oswalt, Fort Stockton, Councilor for District One and Chairman of the TMA Board of Councilors; Dr. Franklin W. Yeager, Corpus Christi, President of the Texas Medical Association; and Dr. William Lockhart, Alpine, immediate Past President.



MEETINGS



Dr. Holt

Dr. Russell Holt of El Paso Elected President Of Texas District One Medical Association

Dr. Russell Holt of El Paso was elected President of District One of the Texas Medical Association at its annual meeting in Pecos, February 5, 1960.

Other new officers are Dr. Harold Lindley, Pecos, Vice-President; Dr. Gordon L. Black, Secretary-Treasurer; Mrs. Louis W. Breck, El Paso, Councilwoman for the District One Auxiliary. Dr. W. E. Lockhart was the retiring President.

Dr. Franklin W. Yeager of Corpus Christi, President of the Texas Medical Association, cited the need for more family physicians. He said that medical societies should inform the public about the availability of their grievance committees.

Creeping Socialism

He said that if creeping socialism were to take over the medical field, it would next embrace insurance, then banking and construction, power companies and finally achieve a complete socialism.

Born in Palestine, Texas, Dr. Holt received his B.A. from Texas Tech and his M.D. from Colorado University Medical School. He interned and did residency work at Robert B. Greene Hospital in San Antonio. He came to El Paso in 1934 as a general surgeon.

Past President

He is a Past President of the El Paso County Medical Society and the Lions Club. He has served as Chief of Staff at Hotel Dieu and the old City-County Hospital in El Paso, and is a member of the Hospital District Board. He is a member of the First Christian Church. He has a daughter, Mrs. E. S. Holmes, who resides at Fort Sill, Okla.

Drs. E. S. Crossett and John M. Verosky of El Paso announced at the meeting that El Paso has been selected as a regional center for the heart division of the Crippled Children's program.

Other speakers were Drs. Ira A. Budwig, C. M. Stanfill, Jack C. Postlewaite, Nathan M. Kleban, William G. Smith, Albert H. Unger, Louis W. Breck and Frederick P. Bornstein.

Dr. and Mrs. Harold Lindley of Pecos were in charge of arrangements for the meeting.

Two Speakers to Be Featured

At Texas Orthopaedic Meeting

Dr. Don O'Donoghue of Oklahoma City and Dr. W. H. Bickel of Rochester, Minnesota, will be featured speakers at the annual meeting of the Texas Orthopaedic Association in Fort Worth April 11, 1960.

Dr. O'Donoghue is Professor and Chairman of the Department of Orthopaedic Surgery and Fractures at the University of Oklahoma Medical School. Dr. Bickel is Consultant in Section of Orthopaedic Surgery at the Mayo Clinic and Professor of Orthopaedic Surgery for the Mayo Foundation, Graduate School, University of Minnesota.

The meeting will be held in the Hilton Hotel in conjunction with the annual gathering of the Texas Medical Association in Fort Worth. The orthopaedic meeting will be in the New Orleans and Derrick Rooms of the Hilton Hotel with a luncheon in the Empire Club.

Other speakers will be Dr. Phil Overton, Jr., Dallas; Dr. P. M. Girard, Dallas; Dr. E. Burke Evans, Galveston; Dr. George W. N. Eggers, Galveston; Dr. David M. Cameron, El Paso; Dr. Royce C. Lewis, Jr., Lubbock; Dr. Louis J. Levy, Fort Worth; and Dr. Bruce Cameron, Houston.

Officers Listed

Officers of the Association are Dr. David M. Cameron, El Paso, President; Dr. Gerald S. Ahern, Corpus Christi, Vice-President; and Dr. Margaret Watkins, Dallas, Secretary-Treasurer. Program Chairman for the meeting is Dr. Rex J. Howard, Fort Worth.

The complete program follows:

9:30- 9:50 "Experimental Fetal Bone Transplant"

Dr. Phil Overton, Jr., Dallas

Dr. O'Donoghue



Dr. Bickel



9:50- 9:55 Discussion
Dr. Charles Gregory, Dallas

10:00-10:20 "Dual-Lock Hip Prosthesis"
Dr. P. M. Girard, Dallas

10:20-10:25 Discussion
Dr. Russ B. Graham, Dallas
Dr. A. O. Loiselle, Dallas

10:25-10:30 INTERMISSION — Coffee served

10:30-10:50 "Two-Plane Fixation of Femoral Fractures"
Dr. E. Burke Evans, Galveston
Dr. George W. N. Eggers, Galveston.

10:50-10:55 Discussion
Dr. Louis Breck, El Paso

11:00-11:40 "Surgical Treatment of Ligament Injuries To The Knee"
Dr. Don O'Donoghue, Oklahoma City

11:40-12:00 Discussion
Dr. Louis J. Levy, Fort Worth

12:00 2:00 LUNCHEON, EMPIRE CLUB

2:00 2:25 President's Address: "Orthopaedic Surgery — An Art"
Dr. David Cameron, El Paso

2:30 2:50 "Management of Crush Injuries of The Hand"
Dr. Royce C. Lewis, Jr., Lubbock, Texas

2:50- 2:55 Discussion
Dr. Robert Cochran, Fort Worth

3:00- 3:20 "Follow-up Evaluation of Fractured Heels"
Dr. Louis J. Levy, Fort Worth

3:20- 3:25 Discussion
Dr. Jack Maxfield, Wichita Falls, Texas

3:30- 3:50 "Study of the Biomechanics of Whiplash Injuries of the Neck"
Dr. Bruce Cameron, Houston

3:50- 3:55 Discussion
Dr. Ruth Jackson, Dallas
Dr. George W. N. Eggers, Galveston

4:00- 4:40 "Postirradiation Fractures of the Neck of the Femur"
Dr. W. H. Bickel, Rochester, Minnesota

4:40- 5:00 Discussion
Dr. Robert Murray, Temple, Texas

Post-Graduate Psychiatric Courses For GPs Scheduled in Phoenix

A series of post-graduate seminars for nonpsychiatrist physicians in Arizona is scheduled to begin in March, 1960, in Phoenix and will consist of two-hour seminars held one evening each week for ten consecutive weeks. The course is designed for physicians who practice in communities which are isolated from medical training centers, as an aid to nonpsychiatrist physicians in recognizing and understanding psychiatric problems. The program will not stress the management of psychiatric problems per se. Focus will be on doctor-patient relationships and on professional relationships between psychiatrists and non-psychiatrist physicians.

Case material will be provided by the physicians themselves from their current practices. Sessions will be guided by two eminent psychiatrist-teachers from Phoenix. As an integral part of the course, the psychiatrist-teachers will be available for telephone consultations with the physician-trainees between seminar meetings. Time and place of the weekly meetings will be determined by the teachers and the trainees. Any qualified physician is eligible to apply for enrollment in the ten-week course. Course enrollment will be limited to fifteen physicians. These seminars will be the first in a three-year program and will be conducted simultaneously in Billings, Montana; Lebanon, Oregon; and Phoenix, Arizona.

Training Program

This training program for nonpsychiatrist physicians was developed by the Western Interstate Commission for Higher Education and is supported by congressional funds through the National Institute for Mental Health. The WICHE staff is responsible for all administrative details related to the program. Warren T. Vaughan, Jr., M. D., Boulder, Colorado, is the Mental Health Project Director for WICHE. A detailed report will be published after the three-year program has terminated. In Arizona, the program is directed by the Arizona State Medical Association, Inc., Robert Carpenter, Executive Secretary.

ORIGINAL ARTICLES

A New Treatment For Peptic Ulcer

By Alexander Coblentz, M.D., *M. Med. Sc. (Surgery), Las Vegas, Nevada*

This preliminary report is made in order to draw attention to the value of a new treatment for the patient with an acute bleeding or non-bleeding gastric or duodenal ulcer, by the combined use of oral *Cosa-Signemycin with intramuscular chymotrypsin.**

This investigation was carried out at the Southern Nevada Memorial Hospital, department of surgery with the cooperation of the roentgenology department.

In ten consecutive cases; eight males and two females, ages 23 to 64, there was a peptic ulcer with either active hemorrhage, severe discomfort or a sealed-over perforation. In two cases, surgical intervention was contraindicated owing to the patients' desperate physical condition. One patient, on exploratory laparotomy, was found to have a sealed-over perforation of the first portion of the duodenum. Seven of the patients had a hematocrit ranging from 4.1 to 9.4. Three of the patients showed no evidence of gastric or duodenal bleeding.

Chart 1 contains the data of the cases in this series before and after treatment.

The admitting information, history, physical examination, roentgenological and laboratory findings were conclusive for a gastric or duodenal ulcer.

Following the prescribed 10 day course of treatment, as described in Chart 2, there were no roentgenological or other evidence of an ulcer of the stomach or duodenum, see Chart 1.

During recent years the indications for surgical intervention for hemorrhage in cases with peptic ulcers, have been clearly defined. However, occasionally surgical intervention is contraindicated owing to the patient's desperate physical condition (1).

Excluding those ulcers associated with lesions of the hypothalamus or extensive burns, the majority bear no relationship to other disease processes. In all likelihood they have a similar etiology.

All etiological theories pertaining to gastric or duodenal ulcers are inadequate. Nevertheless, if a a nursing calf is taken too soon from its mother and given coarse foods, it is prone to develop erosions due evidently to mechanical irritation (2). It is probable that in man the common cause of weakened resistance which gives rise to peptic ulcer, may also be a local irritation, followed by infection of the local erosion.

Acute Stage

The ulcer in the acute stage has a punched-out appearance with soft congested walls and floor, showing a typical inflammatory reaction. Healing of the ulcer may occur without serious change, the remnants being a smooth scar.

The chief abnormality in ulcer patients is the secretion of large amounts of gastric juice in the intervals between meals, particularly at night when the stomach is empty.

Whether the precipitating factors are gastric trauma, local infection, nervous tension or hyperacidity due to hypersecretion, the main factors are the hypersecretion and hyperacidity which contains the protein digestive enzymes — pepsin and hydrochloric acid. They convert the area of pre-ulcer necrosis into an actual ulcer.

In reviewing the physiological chemistry of the gastroduodenal ulcer, consideration was directed to the method of stimulation of the gastric enzymes; also to the action of the enzymes in producing an active ulcer from the original area of erosion within the stomach or duodenum, and the specific type tissue digested by the enzymes pepsin and hydrochloric acid.

Noteworthy Property

One of the noteworthy properties of enzymes is their tissue specificity. This is exhibited as absolute specificity, i.e. pepsin will digest proteins, not fat

*Product of Pfizer Laboratories.

**Chymar, chymotrypsin (aqueous or in sesame oil suspension) a product of The Armour Laboratories, Kankakee, Illinois.

Case No.	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
Hospital No.	55,310	57,631	60,946	12.459	63,048	63,255	12,976	63,641	63,696	63,847
Initials	L.R.	H.H.	T.R.S.	J.L.	G.G.R.	E.L.B.	N.C.	L.T.P.	F.I.	H.H.G.
Sex & Age	M 46	M 47	M 42	M 33	M 40	M 64	F 27	M 51	F 46	M 54
Occupation	Dept. Stor	Dealer	Dealer	Dealer	Construc'n	City Emp.	Hw	Laborer	Hw	Dealer
Chief Complaint on Admission	Vomiting Pain Bleeding	Pain Hem'ge Vomiting	Weakness Dyspepsia Melena	Pain Melena	Vomiting Pain Bleeding	Melena Vomiting Bleeding	Pain Dysp' Vomiting	Pain Anorexia Dyspepsia	Pain Anorexia Dyspepsia	Vomiting due to obstruc'n
Past Ulcer History	7 years	8 months	7 years	3 years	12 years	2 years	None	None	3 years	4 years
Temperature Admission (oral)	99.F	98.0	100.2	N.D.	99.6	100.6	98.0	101.2	98.2	97.6
Hematemesis	++++	++++	++++	++++	++++	++++	None	None	None	None
Melena	++++	++++	++++	++++	++++	++++	None	++++	None	None
Blood Group	A	O	A	A	AB	O	O	O	O	O
Admission Hemoglobin gms	4.15	8.6	5.35	9.4	9.1	8.85	N.D.	9.0	13.6	13.75
Admission Hematocrit Vol%	13	25	19	N.D.	28	27	N.D.	28	40	43
X-ray Diagnosis Date	Duodenal Ac. Hem'g 8-5-58	same 11-7-58	same 4-27-59	same 6-19-59	same 8-17-59	same 8-25-59	Duodenal Acute 9-18-59	Duod.** Ac. Peptic 9-22-59	Duod. Acute 9-23-59	Obstruc'n*** Ac. Duod. 9-28-59
Follow-up X-ray Results Date	Healed 9-25-58	Healed 1-12-59	Healed 5-11-59	Healed 7-16-59	Healed 8-31-59	Healed 9-15-59	Healed 10-9-59	Healed 10-5-59	Healed 10-7-59	Healed 10-13-59

CHART 1

N.D. — Not Done

** — Perforated

*** — Ulcer with psuedo diverticulum

#Dealer — Gambling Casino

or carbohydrates. Dipeptidase hydrolyzes only dipeptides and not the higher polypeptides (3, 4, 5, 6, 7).

The tissue involved in a gastric or duodenal ulcer is a protein.

Some intestinal worms resist the enzymatic action of the gastric juices. For example, the intestinal worm Ascaria escapes digestion in the human intestinal tract because the worm contains a substance which inhibits pepsin (3, 7, 8, 26).

Although this system is very complicated, the introduction of substances into the body can stimulate the existing inhibitors in the blood stream. These inhibitors can be of several different types, first those that negate proteolytic activity, and the second those that interfere with one or another stage of the activation of the enzyme.

Pepsin inhibitors, which appear to be proteins, are found in pancreas, soy bean and raw egg white (3, 9). It is known that animals can be made to react to chemicals as well as to foreign proteins and other animal enzymes. These substances causing enzyme inhibition effects.

An example of this effect is the sulfonamide derivative acetylzoleamide which, although inactive as a bacteriostatic agent, is a potent inhibitor of the activity of the enzyme carbonic anhydrase (3), an enzyme found in erythrocytes and other tissues and which catalyzes $H_2O + CO_2 \rightleftarrows H_2CO_3$. Acetylzoleamide (Diamox) has been found applicable in the control of water and electrolytes excretion because of the importance of carbonic anhydrase in the reabsorption activity of the renal tubules.

Mammalian pancreas contains a protein conjugate chymotrypsin; and this enzyme when injected into the human causes sythesis of protein-like substances through its biological activity, causing transpeptidation reactions negating peptic activity (16).

When given parenterally to patients with gastric or duodenal ulcers, chymotrypsin acts as an enzyme inhibitor, which neutralizes and inhibits secretion of hydrochloric acid with simultaneous elimination of peptic activity in the gastric juice and duodenal mucus (20, 21, 22).

CHART 2

1. Medication

—Blood and fluid replacement as indicated by laboratory findings
—Chymotrypsin* 1 cc parenterally q 12 hours
—Cosa-signemycin 250 mg orally q 6 h
—Antacid tablets or liquid at bedside for P R N use
—In case of hemorrhage Vitamin K 75 mg intramuscularly q 6 h until bleeding is controlled
—Codeine Sulfate grains i (H) q 6 h when indicated
—Tranquilizers for apprehensive cases
—High potency vitamins

2. Diet

—The diet is arranged to gradually increase the kinds and amounts of foods. It is started with a soft diet, with the addition of cooked cereals and half and half cream between meals. When improvement is recognized a regular diet (with the exceptions as indicated below) is started, usually on third day. Excluded are uncooked fruits and vegetables and fruit juices.

3. Not Allowed

—Alcohol, tobacco, vinegar, salad dressings, spices, condiments, prepared, salted or smoked, fatty or fried meats and fish; whole grain cereals, pies, pastries and concentrated sweets. Avoid hot foods, and pork products.

With the combined use of Cosa-Signemycin to control the cellulitis within the ulcer process, prompt relief from pain is usually affected within 72 hours. Following ten days of treatment there is complete absence of ulcer symptoms. Roentgenological evidence of complete healing may be seen as early as two weeks following the start of treatment.

One serious complication of "cured" duodenal ulcer treated by methods such as alkalinization, lavage, etc., is the development of scar tissue capable of producing pyloric obstruction, or a stricture of the duodenum itself. None of the cases treated with the combined Cosa-Signemycin/chymotrypsin method have shown any evidence of scar tissue formation in the follow-up X-ray examination.

All the patients tolerated the medication well, no nausea and vomiting or other side effects were noted. The use of chymotrypsin and Cosa-Signemycin does not seem to produce any deleterious effects on the patient. The over-all impression was that patients on therapy with this enzyme and antibiotic were remarkably free of discomfort. There were no undesirable reactions.

The following cases taken from Chart 1 are the more serious types of peptic ulcer cases and are excellent examples of the effectiveness of this treatment.

Case 1, L.R., Hospital #55310, male, age 45, was readmitted to the hospital on 7-27-58 with a history of sudden severe hematemesis and copious tarry stool. This attack was preceded by anorexia, vague epigastric distress, marked nervousness and dyspepsia, requiring antacids. The past history revealed hospitalization for upper G-I bleeding due to duodenal ulcer on 11-15-51, 12-14-52, 12-21-52, 7-14-53, 6-19-56.

Stormy Course

His condition following admission to the hospital followed a stormy course. The bleeding became severe and on 7-31-58 the hemoglobin was 27.8% and 4.14 grams, with a hematocrit of 16%. He was placed on a Sippy diet #1, Demerol 100 mg P R N., Synkovite 75 mg q 6 h, Streptomycin with Chlormycetin grams 1 each q 6 h, and Whole Banked Blood, 5 units.

On 8-2-59 the author was called in as consultant.

Following a thorough evaluation of the patient, the patient was considered in too desperate physical condition to withstand surgery. The hemoglobin on 8-2-58 was 4.15 grams, hematocrit was 13 volume %, melena was marked.

Due to his critical condition, he was placed on the treatment as described in Chart 2. His response was gratifying, and on 8-5-59 the patient was examined roentgenologically. The film studies confirmed the subjective and objective findings, revealing a rather large, irregular deep or penetrating ulcer on the posterior aspect of the bulb near the apex. The treatment with Cosa-Signemycin and chymotrypsin was continued to complete the ten day course of treatment. His progress was excellent and on 9-25-59 the X-ray reexamination report was as follows: the gastric mucosa motility and peristalsis were within normal limits.

The duodenum was reexamined rather exhaustively with special reference to the area previously reported as the site of an ulcer. The bulb filled and emptied well, was not spastic or tender. There was a persistent mucosal irregularity near the apex in the bulb, rather shallow in contour, which may represent a residua from the previously reported peptic ulcer. There is no current evidence of hypersecretion, no evidence of pyloric spasm or stenosis of this region or the bulb, no marked psuedo-diverticulum to suggest the possibility of impending perforation. The proximal small bowel mucosa visualized was within normal limits, and the barium was in the terminal ileum within three hours with minor minimal quantities in the colon. Impressions: Current radiographic findings are

compatible with a healing or healed duodenal ulcer, with no current evidence of spasm, hypersecretion, or complications.

General Weakness

Case 3, T.R.S., Hospital #60,946, male, age 42, admitted 4-25-59, for what the patient believed was an acute episode of influenza, due to generalized weakness and frequent loose black stools for the past ten days. The past history shows that he had been under treatment for a duodenal ulcer several years ago. He had been obtaining relief from soda mint tablets, milk of magnesia, ordinary baking soda in water, Aspirin and Aspirin containing preparations. Physical examination showed the patient to be well developed, anemic in appearance, no evidence of vitamin deficiency. Liver and spleen not palpable nor tender. There was moderate tenderness of the epigastric region with no other positive findings. Laboratory findings were WBC 5,300, RBC 1,530,000 with Polys 67%, lymphs 23, Mono 9. The Hemoglobin 34.5%, 5.35 gms, Ht 19 Vol. %. Urine was negative. Stool black and contained blood. He was given 2 units WBB, plus 2,000 cc gastric isolytes.

The X-ray examination on 4-27-59 showed there was no abnormality of the esophagus, no cardia spasm, no hiatus hernia, no varices. The stomach was empty at the beginning of the examination. The mucosal pattern was within normal limits; there was no tenderness to palpation, mobility was normal. The pylorus was adequately patent. The duodenal bulb was markedly spastic but not remarkably tender. Multiple spot films show hypertrophy of the mucosa, irregularities compatible with scar tissue contraction and one or more small areas compatible in appearance with peptic ulcer. Due to the capacity of the bulb, the location of these defects in the anterior or the posterior wall could not be made with certainty. The duodenal loop was normal in appearance. The proximal small bowel mucosal pattern was unremarkable.

Follow-up Films

A series of follow-up films taken for small bowel shows the stomach completely empty at thirty minutes and the proximal jejunum shows a normal mucosal pattern which is relatively well cleared. The distal jejunum and ileum showed rather marked sudden changes in caliber characteristic of hyperperistalsis but no indications of mucosal edema. The first barium that entered the colon at thirty minutes from the small bowel was essentially clear at one hour and one-half with only traces remaining at three hours. At this time the barium column was at the spenic flexure. Impressions: Chronic duodenal ulcer disease, probably active with multiple small areas compatible in appearance with acute peptic ulcer; hyperperistalsis and segmentation with a remarkably increased transit time through the small bowel. This may be neurogenic in origin or be a manifestation of bleeding.

Therapy with Cosa-Signemycin/chymotrypsin was started immediately following the latter report. The immediate effect upon the patient was seen in the following laboratory findings of 5-1-59: R B C 3,380,000, Hb 59.1%, 9.1 grams, Hematocrit 29 vol %. The progress of the patient was uneventful and he was discharged from the hospital. Upper G-I reexamination was done on 5-11-59 with the following report: A repeat examination again demonstrates normal function, structure and mucosal pattern of the esophagus. The stomach was not tender, mucosal pattern was normal with no evidence of ulceration. In contrast with the first examination, the duodenal bulb was no longer spastic, nor tender.

Multiple films taken with the direct and air contrast techniques showed a marked decrease in the previously noted edema of the duodenal mucosa and on this examination failed to demonstrate any indication of acute or chronic peptic ulcer. The duodenal loop was normal. The proximal small bowel was within normal limits. Transit time through the colon was somewhat accelerated but in contrast to the previous study, the mucosal pattern of bowel was much improved. Impression: No radiographic or fluoroscopic findings of a duodenal ulcer, marked improvement of the mucosal pattern and the fluoroscopic behavior of the duodenal bulb.

Hyposthenic Status

Case 8. L.T.P., Hospital #63641, 51 year male, hyposthenic status was first seen on 9-12-59, when he was seized with acute colicky pain immediately over the gall bladder region. All factors suggested passage of a gall stone. Intravenous cholangiograms obtained twenty-four hours later on 9-13-59

revealed a functioning gall bladder with what appeared to be two bands across the ampulla and neck of the gall bladder. There was no significant allergic history, no reaction to the test dose of intravenous injection of 20 cc's of 50% Cholografin.

A preliminary film showed no calcification within the biliary tree. Moderate costochondral calcification in the region was noted.

At five minutes, a scout film showed essentially no secretion of the biliary contrast medium by way of the urinary tract, an early and excellent outline of the gall bladder and right and left hepatic ducts and a portion of the common duct. Multiple films in several projections were taken over a period of the next two and one-half hours. These disclosed two permanent deformities of the gall bladder, one approximately one-third of the way through the fundus of this structure, one at the junction of the cystic duct. Appearance of these is consistent with peritoneal bands.

Cystic Duct

The course and caliber of the cystic duct, hepatic ducts and the common ducts are normal. Examination shows no evidence of stone.

Following the fatty meal, there was a satisfactory contraction of the gall bladder. Impressions: (1) Excellent liver function and gall bladder concentration power with early and adequate opacification. (2) Extrinsic bands across the gall bladder and the neck of the junction of gall bladder and cystic duct as described above, no evidence of stones. (3) Normal contraction of the fatty meal.

Following the roentgenological examination, the pains were less severe, however, the patient developed chills; his temperature which had been normal on admission, rose to 100.2F. Anorexia was marked. The patient would not eat or drink. He was given I.V. fluids and the laboratory report showed the WBC reaction typical of an inflammatory process (16,500). Antibiotic therapy was started, with rapid effect. There remained the localized gall bladder tenderness; and due to the normal gall bladder function the possibilities of a peptic ulcer was given consideration. There was no abdominal distention, no abdominal discomfort, no history of melena or hematemesis. Five days after admission the gall bladder region remained tender, the temperature was normal, and laparotomy was decided upon. The following were the surgical findings: Upon opening the abdomen through a transverse subcostal incision, the gall bladder was covered with a thick fibrinous exudate. This was removed from the gall bladder which was normal. Extending across the ampulla and cystic duct, from the region of the first portion of the duodenum, was an organized fibrinous band of exudate. This was removed. Examination of the duodenum and pylorus revealed that the fibrinous material was originating from the region of the sealed-off duodenal perforation. The duodenum and pylorus in this area were markedly thickened and edematous.

The fibrous exudate over the perforation was not disturbed as the opening appeared to be thoroughly sealed off. The abdomen was explored for gastric content in the right gutter. No evidence of abdominal contamination was found. The abdomen was then closed without drainage. The post-operative care following recovery from the anesthesia was that described in the management of the other ulcer patients. Roentgen examination four days after surgery revealed the following: The patient's recent surgery precludes examination with intra-abdominal increased pressure and extensive pressure spot films. There was no abnormality of the swallowing function, no identified hiatus hernia, varices or cardio spasm.

Gastric Mucosa

The gastric mucosa was relatively normal in appearance, there was no marked hypersecretion.

Peristalsis was promptly initiated and moved the contrast medium through a small but adequate pylorus. There was a barium density seen in a number of projections approximately 5 mm in diameter, occasionally smaller, surrounded by a zone of edema, compatible in appearance with an acute, shallow peptic ulcer.

Minimal hypertrophy of the duodenal loop was noted. At three hours, the stomach was empty. The bulk of the barium was in the terminal ileum, a normal transit time. There was no gross abnormality of proximal small bowel. Impressions: (1) Acute duodenal ulcer at the base of the duodenal bulb. (2) No other significant abnormality.

The C-Cs treatment was started on the day of

surgery and continued for ten days with symptomologic healing. On 10-5-59 the follow-up X-ray report was:

The patient was recovered from his recent surgery permitting examination in the deep Trendelenburg position. This disclosed no abnormality of the esophagus. There was no marked hypertrophy of the gastric mucosa, there were no retained secretions at the beginning of the examination.

Peristalsis moved normally through the body of the stomach, there was no evident gastric ulceration. There was no tenderness to palpation over the duodenal bulb, no spasticity. Examination of the region of the previously noted ulcer in multiple projections revealed no indication of this defect. In comparison with previous studies the mucosa of the duodenal loop was much more normal in appearance.

Barium Retained

At three hours there was minimal retained barium mixed with food, a finding not to be considered abnormal in this patient. The majority of the barium had moved in a smooth column into the terminal ileum and ascending colon, a normal transit time, a normal three-hour appearance. Impression: (1) Healed duodenal ulcer; no current abnormality of the upper GI series.

Case 10, H.H.G., Hospital #63,847 male, age 54, admitted to the hospital on 9-28-59 with a C.C. of inability to retain any foods or liquids, accompanied by vague upper abdominal discomfort. Onset about eight days ago, with hematemesis six days ago and followed by tarry stools. His past history was that of indigestion over the past few years, relieved with gelusil, aludrox, etc. About one year ago he was treated for a duodenal ulcer. Physical examination revealed slight tenderness of the epigastrium. All systems were negative for pathology. The clinical laboratory reported W.B.C. 10,800, Hb 88%, Hematocrit 43%, Hemoglobin 13.75 grams. Roentgenological examination on 9-28-59 revealed there was no abnormality of the swallowing function except a minimal slowness. There was no indication of cardio-spasm or of esophageal varices or hiatus hernia. There was no fluid retention at the beginning of the examination of the stomach. The patient was kept under intermittent observation for a period in excess of three hours. During the interval, active peristalsis was never observed. While at rest a small quantity of barium filtered through the pylorus into the small bowel. A minimal non-specific abnormality of the appearance of the jejunum was noted. The stomach was high and transverse, inaccessible to direct palpation.

Examination with conventional techniques and with air contrast methods were attempted. The pylorus remained tightly closed. In the superior-posterior aspects of the duodenal bulb there was a persistent barium fleck seen on many of the films which may represent a psuedo-diverticulum of a peptic ulcer. The barium suspension was markedly flocculated by hyperexcretion and this, together with a lack of peristalsis, obscured the fine mucosal detail. Impression: Almost complete atony of the stomach, marked by pylorospasm with markedly delayed emptying of the stomach. Persistent irregularities of the appearance of the duodenal bulb suggesting an acute peptic ulcer. An ideal demonstration of an ulcer crater cannot be accomplished under these conditions. Reexamination after a suitable period of medical management was indicated.

Reexamination

The patient was then started upon the treatment as outlined in Chart 2, and reexamination was then done. The following is the report: 9-30-59 additional films of the duodenal bulb were made. In comparison with the previous films of 9-28-59, there was no pylorospasm. Peristalsis moved smoothly through the body of the stomach. The duodenal bulb was deformed with a persistent barium density in the pyloric canal compatible with a psuedo-diverticulum of a chronic duodenal ulcer. Spasm of the bulb distal to this area was noted, there was no marked abnormality of the mucosa of the duodenal loop beyond the bulb. Impression: Pseudo-diverticulum of the penetrating duodenal ulcer within or immediately adjacent to the pyloric canal, marked secondary persistent spasm, no further evidence of functional obstruction. The Cosa-Signemycin/chymotrypsin treatment, as described, was continued for ten days, and on 10-13-59 upper G-I recheck films were obtained, with the following findings reported: There was no abnormality of the swallowing function, no cardiaspasm or evidence of

esophageal varices. On this examination the patient was asymptomatic, he was placed in the very steep Trendelenburg position and the distal esophagus more adequately examined than possible on previous studies. There was a small herniation of the gastric mucosa apparently of the short esophagus, which could be demonstrated only with increased intra-abdominal pressure.

A contraction ring was present at the junction of the esophageal and gastric mucosa but there was no evidence of active peptic ulceration. Demonstration of this abnormality did not cause any complaints. There was no fluid retention in the stomach, the gastric mucosa was now normal in appearance. Peristalsis began immediately, delivering adequate quantities of contrast medium through a normally patent pylorus. There was no tenderness to palpation, no current spasm of the duodenal bulb. This structure was examined in multiple projections and a barium-containing defect was not identified in this region of the previous ulcer. There was no residual scarring demonstrated. At three hours, minimal barium remained mixed with food in the distal stomach. The remainder of the barium column was in the terminal ilium and ascending colon, an essential normal transit time. The proximal small bowel mucosa was then normal. Impression: In the deep Trendelenburg position there was an apparent hiatus hernia of the short esophagus with a transient contraction ring of the esophageal and gastric mucosa, suggesting old scarring, no evidence of current acute inflammatory disease. No indication of symptoms during the demonstration of this abnormality. No mucosal abnormality of the stomach, active peristalsis, no fluid retention. No spasm, tenderness or deformity of the duoden bulb, no peptic ulcer demonstrated.

The patients were then placed on a diet of all foods excluding alcoholic beverages and acid-type condiments, etc.

Summary

Proteolytic enzymes are highly specific in their action (10). In consideration of their chemical structure and biological activity, it has been shown that their action is one of absolute specificity (3). It has been known that chymotrypsin has specific peptidase and esterase activities (11), also that there are natural occurring trypsin inhibitors against chymotrypsin (22). This inhibitor of chymotrypsin may be found in various animal species (5), and the opposite is true for chymotrypsin, which may be obtained from mammalian pancreas, and has been found to be an inhibitor of the gastric secretions.

In the classification of proteolytic enzymes, the chymotrypsin action as an inhibitor of gastric secretion also has been shown to produce changes in the duodenal mucus (20), thus inhibiting or neutralizing hydrochloric acid and simultaneously eliminating the peptic activity of the gastric secretions thereby permitting healing of the peptic ulcer.

Ten patients were treated for an acute phase of a peptic ulcer, with this proteolytic enzyme obtained from mammalian pancreas (chymotrypsin). This enzyme produced effective neutralization by inhibition of hydrochloric acid secretion with elimination of the peptic activity. With the combined use of Cosa-Signemycin to control the cellulitis of the ulcer process, healing of the ulcer process was obtained in less than two weeks, without the use of antiacids, anticholinergic drugs or the usual ulcer regime.

Conclusion

The results of this study indicate that the combined administration of Cosa-Signemycin and chymotrypsin in the treatment of gastric or duodenal ulcers confers sufficient therapeutic effect to arrest and heal the disease. Although some response may be obtained from the use of chymotrypsin alone, an excellent response was obtained in all patients with an acute peptic ulcer by the combined use of oral Cosa-Signemycin with the intramuscular injections of chymotrypsin. Follow-up X-ray examination revealed complete healing in the treated cases.

BIBLIOGRAPHY

1. Mixter, Jr. G. and Hinton, J. W. Gastroduodenal Hemorrhagic Diatheses: A Report of Ten Cases Treated by Vagectomy. *N.Y.J. Med. 57: 3808-3814.* Dec. 1, 1957 New York.

2. Boyd, William. Surgical Pathology—The Stomach and Duodenum. *Page 259-260.* 1939 W. B. Saunders Company, Philadelphia

3. Harper, Harold A. *Review of Physiological Chemistry,* Pages 104, 111, 153, 156

4. Balls, A. K. and Jansen, E. F. *Stoichiometric Inhibition of Chymotrypain.* Purdue Univ., Lafayette, Indiana. Advances in Enzymol. 13, 321-43 (1952).

5. Scavola, M. E.; Novati, C. C. and Pelisati, D. *Distribution of Inhibitors of Trypsin and Chymotrypsin in Tissues of Various Animal Species* Ist. sieroterap., Milan Boll. soc. ital, biol. sper. *30,* 261-3 (1954).

6. Niemann, C. *Proteolytic Enzymes.* California Inst. Technol., Pasadena Record Chem. Progress *12,* 107-15- (1951)

7. Waley, S. G. and Watson, J. *Rearrangements of the Amino Acid Residue in Peptides by the Action of Proteolytic Enzymes.* Courtaulde Ltd., Berks, England Nature *167, 360-1* (1951)

8. Holley, R. W. *Enzymic Removal of the Protecting Group in Peptide Sythesis.* Cornell Univ., Geneva, N.Y. J. Am. Chem. Soc. *77,* 2552-3 (1955)

9. Stahmann, M. A. and Becker, R. R. *A New Method for Adding Amino Acids and Peptides to Proteins.* Univ. of Wisconsin, Madison. J. Am. Chem. Soc. *74,* 2695-6 (1952)

10. West, P. M. and Hilliard, J. *Proteolytic Enzyme Inhibitors of Human Serum in Health and Disease.* Proc. Soc. Ezptl. Biol. Med. *71,* 169-72 (1949)

11. Tauber, H. *Chymotrypsin Inhibition by Human Serum in Health and Disease.* U.S. Marine Hosp., Staten Island, N. Y. Proc. Soc. Exptl. Biol. Med. *74,* 486-9 (1950)

12. Pernow, B. *Inactivation of Substance P by Proteolytic Enzymes.* Karolinska Inst., Stockholm. Acta Physiol. Scand. *34,* 295-302 (1955) (in English).

13. Vaslow, F. and Doherty, D. G. *Thermodynamic Study of some Enzyme-Inhibitor Complexes of Chymotrypsin.* Oak Ridge Nat'l Lab., Oak Ridge, Tenn. J. Am. Chem. Soc. *75,* 928-31 (1953).

14. Hilliard, J.; Nyc, J. P. and Maron, D. M. *A Colorimetric Method of Evaluating Chymotrypsin Inhibitors in Human Serum.* Univ. of California, Los Angeles. Proc. Soc. Ezptl. Biol. Med. *81,* 341-4 (1952)

15. Kaufman, S.; Neurath, H. and Schwert, W. *Specific Peptidase and Esterase Activities of Chymotrypsin.* J. Biol. Chem. *177,* 793-814 (1949); cf. C.A. *42,* 7800c.

16. Johnston, R. B.; Mycek, M. J. and Fruton, J. S. *Catalysis of Transpeptidation Reactions by Chymotrypsin.* Yale University J. Biol. Chem. *187,* 205-11 (1950)

17. Wood, H. N. *Enzymic Degradation of Chymotrypsin with the Formation of an Active End Product; Characterization of the End Product.* Purdue Univ., Lafayette, Indiana. Univ. Microfilms (Ann Arbor, Mich.) Publ. No. 14437, 90 pp. Dissertation Abstr. *16,* 445-6 (1956)

18. Neurath, H. *Some Considerations of Chemical Structure and Biological Activity of Chymotrypsin.* Univ. of Washington, Seattle. *Modern Trends in Physiol. and Biochem.* (Woods Hole Lectures Mem. Leonor Michaelis) 1952, 453-70.

19. Tauber, H. *Synthesis of Proteinlike Substances by Chymotrypsin from Dilute Peptic Digests and their Electrophoretic Behavior.* Univ. of North Carolina, Chapel Hill J. Am. Chem. Soc. *73,* 4965-6 (1951).

20. Hartiala, K. and Grossman, M. I. *Chemical and Physical Changes in Duodenal Mucus.* University of Illinois, Chicago. J. Biol. Chem. *195,* 251-6 (1952).

21. Mars, P. H. *The Activation Mechanism of Chymotrypsinogen.* Parm. Weekblad *89,* 33-9 (1954).

22. Wu, F. C. and Laskowski, M. *Action of the Naturally Occurring Trypsin Inhibitors Against Chymotrypsins alpha and B.* Marquette, Univ., Milwaukee, Wisc. J. Biol. Chem. *213,* 609-19 (1955)

23. Jauregg, T. W.; O'Neill, J. and Summerson, W. H. *The Reaction of Phosphorus-Containing Enzyme Inhibitors with Amines and Amino Acid Derivatives.* Chem. Corps Med. Labs., Army Med. Center, md. J. Am. Chem. Soc. *73,* 5202-6 (1951).

24. Jansen, E. F.; Nutting, F. and Balls, A. K. *Mode of Inhibition of Chymotrypsin by Diisopropyl Fluorophosphate. I.* Introduction of Phosphorus. J. Biol. Chem. *179,* 201-4 (1949).

25. Astrup, T. and Alkjaersig, N. *Classification of Proteolytic Enzymes by Means of their Inhibitors.* Carlsberg Foundation, Copenhagen.

26. Sakota, N. *The Mechanism of the Activation of Alpha Chymotrypsinogen to Alpha Chymotrypsin.* IV. The Peptide Liberation during Activation. Osaka Univ. J. Biochem (Japan) *43,* 565-74 (1956).

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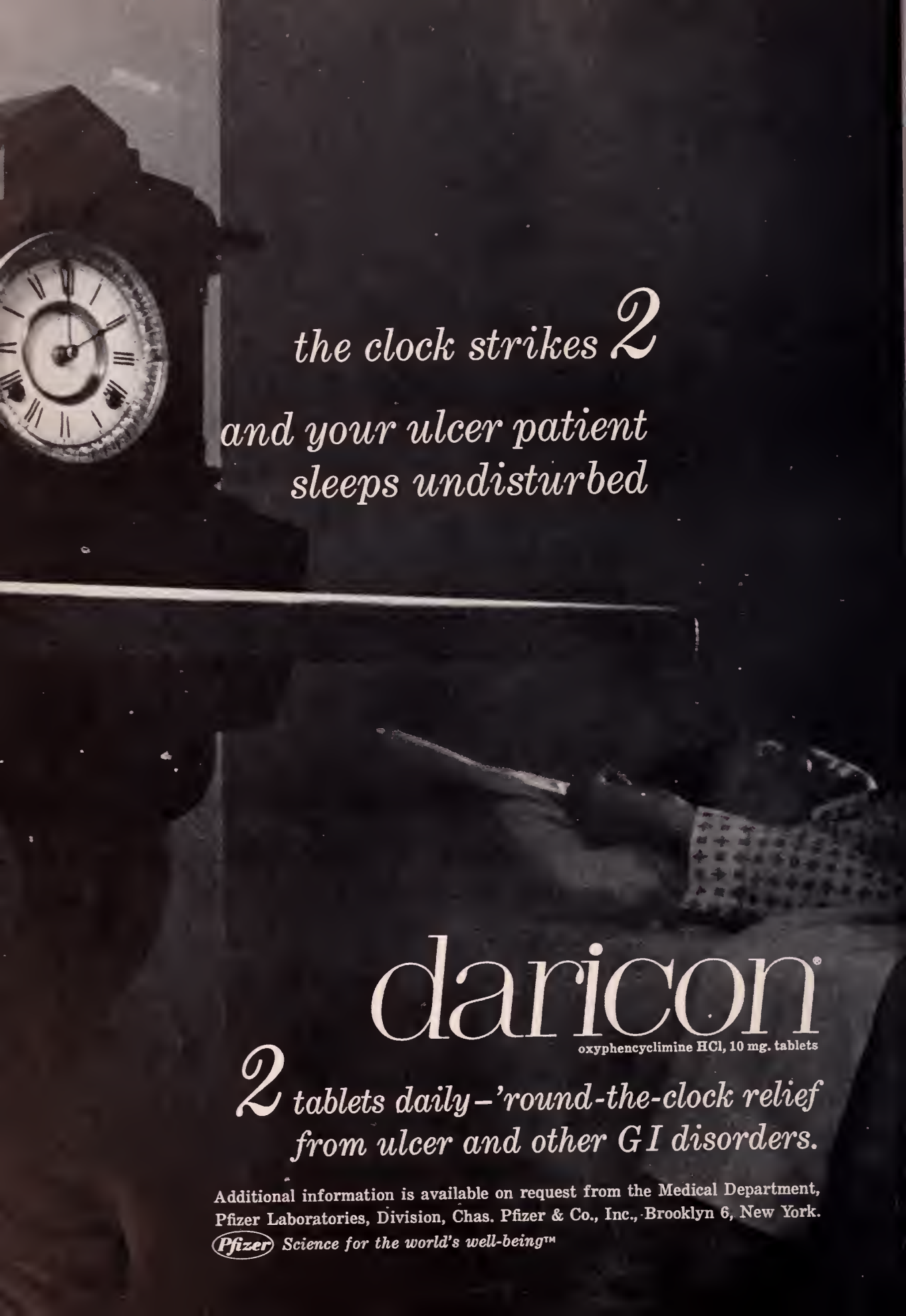
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"We who pride ourselves upon our humanity and generosity are probably more cruel through indifference to our oldsters than almost any other people in history." — Brother B. Stephen, Dean of St. Michael's College at Santa Fe, N. M., at the Jan. 23 and 24, 1960, statewide Symposium on Aging Problems, sponsored in Albuquerque by the N. M. Medical Society and the N. M. Department of Public Health.

Comment

After SOUTHWESTERN MEDICINE had gone to press for its February 1960 issue, Dr. Samuel L. Cohen of Phoenix, whose article, "An Axial View of the Hip Joints," was being published in the February issue of SOUTHWESTERN MEDICINE, learned that the view expressed in his article was originally discovered in France in 1920 and has been utilized to a considerable extent by various orthopaedic surgeons and radiologists.

Dr. Cohen expressed regret that he was unable to inform SOUTHWESTERN MEDICINE of the origin of his view in time for mention to be carried in the bibliography accompanying his article.


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R. E. Thomason General Hospital, El Paso

December 17, 1959 — *Case No. 1341*

F. P. Bornstein, M.D., *Editor*

Presentation of Case by Charles Logsdon, M.D.

History: Dr. Nathan Kleban:

A 33-year-old Latin-American man was admitted to the hospital on September 28 and died on October 5, 1959.

At age 14 the patient had epistaxis, arthritis in both knees and chest pain. When seen in cardiac clinic at age 15 a loud systolic murmer and a soft diastolic murmer were described at the apex. Blood pressure was 110/50. There was no clear-cut heart failure. Only a systolic murmur was subsequently described over a two months period. He was rejected for military service because of a heart murmur.

Cardiac decompensation became manifest in 1951 at age 25. Rhythm was atrial fibrillation. Later attempts to convert to normal sinus rhythm with quinidine were unsuccessful. Reported were grade IV systolic murmur and duplication of the second sound at the apex, diastolic murmur at the base and elevation of the lower end of the sternum in systole. It was the impression of the cardiologist that there was recurrence of active rheumatic carditis, mitral stenosis and insufficiency, aortic and tricuspid insufficiency.

Numerous hospitalizations occurred because of symptoms and signs of cardiac decompensation. In 1954 there was transient loss of consciousness thought to be due to possible cerebral embolus. Pericarditis was a diagnosis in 1955. In that year cardiac surgery was considered but not carried out. Sulfa and benzathine penicillin were used prophylactically but irregularly. Epistaxis and ecchymoses occurred in 1958. He worked as a boiler maker, truck driver and grocery clerk until 1958.

An anticoagulant, warparin, was administered for 10 days in August, 1959, for transient neurological changes.

Cardiac catheterization was done at another hospital on September 19, 1959. Blood pressure was 130/40. Impulses were felt at the left sternal border in the fifth intercostal space and in the eighth at the mid-axillary line. First mitral sound was loud. A high pitched grade II-III decrescendo murmur was heard at the base and transmitted to the apex. There were no thrills, clubbing, cyanosis or edema. Peripheral arterial pulses were strong. Rales were heard over the left lower lobe. The liver was enlarged. Electrocardiogram suggested left ventricular hypertrophy.

On X-ray film and fluoroscopic examination of the heart there was considerable enlargement of both ventricles and particularly of the left atrium. Effusion and hilar dance were absent. Catheter diagnoses were: Rheumatic heart disease; aortic regurgitation; pulmonary hypertension and pulmonary vascular disease; congestive failure.

Final hospital admission occurred on September 28 because of sudden onset of right hemiparesis and inability to speak.

Physical Examination:

T. 99, P. 56 (radial), R. 28, B. P. 120/50.

The patient appeared semi-conscious, was unresponsive. There was right hemiparesis. Cardiac findings were unchanged. There was a slow ventricular rate with atrial fibrillation. Liver was enlarged but there was no edema.

Hospital Course:

Opening pressure during lumbar puncture was equivalent to 110 m.m. of water. After about 15 cc. of clear fluid was removed pressure was 65 mm.

Heparin, warparin, digitalis and quinidine were prescribed. There was no remarkable worsening of the chronic congestive heart failure. Despite some improvement in state of consciousness death occurred quietly on October 5, 1959.

Laboratory Findings:

Blood Counts: 9-28-59—Hb. 16.3 gm., Ht. 48%, WBC 9,200, Stabs. 6, Segs. 78, Lymphs. 14, Monos. 2.

Prothrombin time: 9-28-59—52% (Pt. 17", C. 13"). 9-29-59—28% (Normal Proth. time 13 sec., Pt's 19 sec.). 9-30-59—27% (Normal Proth. time 13 sec., Pt's 19.5 sec.). 9-30-59—17% (Pt's 25.5", C. 13"). 10-1-59—16% (Patient 27", C. 13"). 10-2-59—13.5% (Pt. 31", C. 13"). 10-3-59—13.5% (Pt. 27.5", C. 13"). 10-4-59—27% (Pt. 19.5 sec. control 13 sec.)

Urinalysis: 9-28-59—Amber, turbid. acid—S. G. QNS, albumin 4+, sugar negative, WBC 2-3/hpf, RBC 4-8-hpf, occasional hyaline casts, few bacilli.

Spinal fluid: 9-28-59—WBC 3, polys 2, lymphs. 1, Sugar 71 mg.%, total protein 26.6 mg.%. Gold curve 0011000000.

Blood chemistry: 9-28-59—CO_2 capacity—19 mEq/L. Urea nitrogen—28.2.

Serology: 9-28-59—negative

Blood culture: 9-28-59—no growth. 9-29-59—no growth. 10-1-59—no growth.

X-ray chest: 9-28-59—Portable re-examination of the chest and comparison with previous study reveals a generalized intensification consistent with accompanying congestive failure. The previous observed area of pneumonitis is disappeared. Conclusion: Rheumatic heart disease with accompanying congestive failure.

X-ray Discussion: Dr. Vincent Ravel:

We have here a series of four sagittal views of the chest, the first one was taken in 1951. Over a period of approximately eight years there has really been very little change except in the last film, where we have signs of congestive failure. There is marked enlargement of the left atrium; the pulmonary artery segment is quite prominent; the right atrium is enlarged as well as the left ventricle; and this brings to mind the possibility of a double lesion, a mitral and aortic lesion, together with a possible congenital anomaly, such as a septal defect.

Clinical Discussion: Dr. Charles Logsdon:

I first saw this patient in 1951 at which time he was in congestive failure. He was 25 years old. A diagnosis of mitral regurgitation as the principal lesion, of mitral stenosis, and a very significant aortic regurgitation, a relative tricuspid regurgitation and of uncontrolled atrial fibrillation was made. Since we know that these patients are quite capable of living for a long time with severe valvular lesions, as he subsequently demonstrated, a diagnosis of rheumatic myocarditis was also made at that time to explain the severe congestive failure.

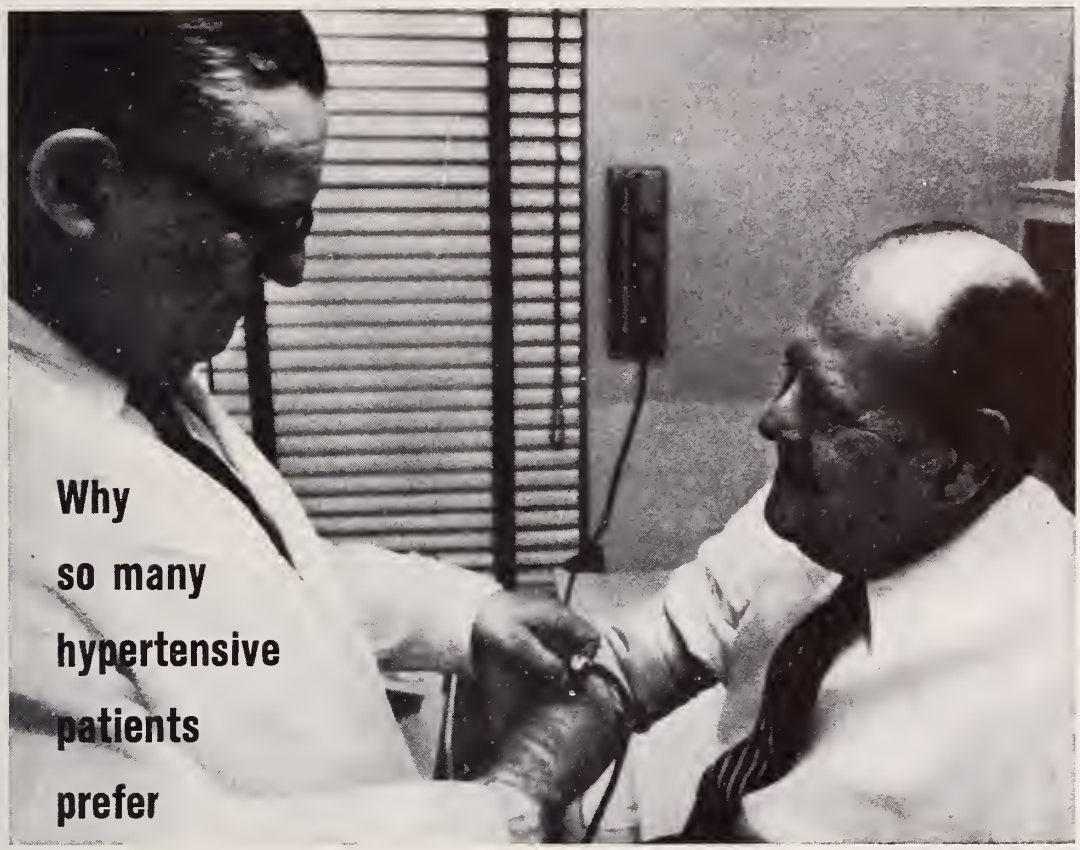
It was noted in the protocol that the inferior portion of the sternum was visibly elevated in systole which in this type of case is presumptive evidence of tricuspid insufficiency as it implies a very considerable enlargement of the right heart. This also implies a dilatation of the tricuspid ring with relative insufficiency of the tricuspid valve.

For several years after we saw this patient the first time, he had off and on a very frankly pulsating liver. In this phase of their disease these patients usually die. They usually die of progressive, intractable heart failure or a complication of their heart failure or heart disease such as embolism. Surprisingly, this patient showed a good deal of recovery over a period of years. His heart remained large, his fibrillations continued and his valvular lesions were apparently unaltered. Nevertheless, he got better. His liver shrank in size; it was no longer palpable; his sternum was not elevated in systole; and he did reasonably well. His treatment was sporadic. He would go to California and stay for a period of time and he would show up in the clinic, undigitalized, and in failure. Finally in 1956 he had married for a second time, I think he stayed digitalized until his death.

At that time, in spite of his large heart and all of his valvular lesions, he was in very good condition. In April of 1956 he was approved for vocational rehabilitation and he took a course in barbering. He came back in a few months and for three years or more, made his living as a barber and did fairly well. He worked most of the time and supported the family which he started in those three years.

The patient had heard a good deal about cardiac surgery over a period of years, and he had always said if an operation was ever devised for his type of heart disease, he wanted to be a guinea pig.

In August of 1959 I saw the patient before he came into the hospital. I saw him in the office because it was not a clinic day and he was feeling very bad. He came into the office. His heart was fast, although he was taking digitalis; and his liver was pulsating again, which was the first time in some years he had demonstrated that phenomenon. That was his complaint, by the way, that his abdomen was very uncomfortable because of a



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*Herrmann, G. R., Vogelpohl, E. B., Hejtmancik, M. R., and Wright, J. C.: J.A.M.A. 169:1609 (April 4) 1959.

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large pulsating liver. It was shortly after this, a matter of days, that he entered the hospital with the transient neurological changes referred to in the protocol, which were thought to be due to a cerebral embolism.

On this hospitalization he ran a low-grade temperature, rather more than is usually found in a patient with slight cerebral embolus and nothing more; although I presume he had sufficient congestive phenomena in various organs to account for the temperature, which I believe went over 100 on occasion, perhaps every day while he was in. At any rate, at that time I wondered if his general condition might be masking something like an S.B.E. which seemed very unlikely. After this he was seen in the out-patient department. He was somewhat better, but he didn't compensate as he had on other occasions, and he was quite insistent about surgery.

Well, it seemed highly unlikely that he could be submitted to any kind of cardiac surgery; but I did send him to Dr. Crossett and asked him to reconsider him, and some days later he was admitted to the hospital for cardiac catheterization. He was seen after that and he was in fairly good condition, and then nine days after the catheterization he again suffered a cerebral episode of some sort and was admitted to the hospital semi-conscious and with hemiparesis, and died on the seventh hospital day.

The cardiac catheterization of course accomplished nothing except for some interesting data. It is difficult to see how it might have contributed in any way to his terminal illness. Once this type of patient starts to throw emboli, he approaches the terminal phase of the illness. Once they start throwing emboli, they don't stop because the conditions which produce the emboli and make them mobile, go right on. You can't alter them; and so the first embolus is usually a warning of what's coming up.

I discussed with Dr. Crossett the possibility of operating him, and I am sure he didn't take it too seriously; but I think the only thing that might have been accomplished in this boy, assuming that a valvular repair was impossible, would have been a tie-off of the left auricle, which might have slowed down his embolization and might have given him, had his heart compensated, another year or two. It was my impression that his principal lesion was mitral and the valve was largely regurgitant and secondarily stenotic, and that the next most important lesion was aortic regurgitation.

These two lesions have their principal regurgitation of course on the left ventricle and the left atrium, which becomes quite huge as you can see here, it contributes to that double shadow, that shadow that you can see on the right and there is another one that you can see on the left. Of course the left atrium becomes the repository for a great many thrombi, which under certain conditions will start moving, and with a rise in venous pressure in the pulmonary circuit and with the subsequent rise in the arterial pressure, the right side of the heart begins to enlarge.

We see these patients in the state that he was in and with regurgitant pulmonary valve and regurgitant tricuspid valve and a generalized cardiomegaly. Once that starts, recovery for any length of time is not very likely, even though it did occur in this boy, and even though Dr. Crossett has been using an operation for repair of this type of lesion, it's very doubtful that a patient of this type would even pass through the first stage of anesthesia without a cardiac arrest, and certainly these old rheumatic myocardia are very hard to get started again when they do stop. If someone wants to discuss the catherterization data I would be glad to have them do so, although I dare say it is not too pertinent to the remainder of the discussion.

About all there is left to comment on is the mode of death in this patient. It seems to be a fairly straightforward sort of case. The usual mode of death is cerebral embolism, and it is most certainly the most attractive diagnosis, not only in this case but in all such cases.

There are a few things about mitral thrombi and their mobilization that are rather pertinent. Autopsied cases like this usually show numerous emboli, and for the most part they are old, in the lungs, in the spleen and the kidneys. Most of them, because of the many symptoms, and the morbidity of the illness, pass unnoticed. In almost all cases the abdominal emboli cause pain and fever, and sometimes they even cause abdominal operations. One such case of mine was operated, for an appendiceal abscess, by some very good men, who never found the abscess.

If the emboli end up in the lungs you can see, toward the end anyway, how difficult it would

be for them to cause symptoms that would be remarkable. After all, it is not unusual for these patients to spit blood, not unusual to have pulmonary congestion, so the pulmonary emboli frequently pass unnoticed, although the X-ray report on the protocol would indicate that he perhaps did have a pulmonary embolus or maybe pneumonia.

This type of patient does not as a rule start the formation of thrombi in the atrium until congestive failure and atrial fibrillation intervene. That is true whether it is a stenotic lesion or a regurgitant lesion, although in the stenotic lesion it would seem, statistically, the formation of thrombi is more likely, and occurs more readily than in the regurgitant lesion; but once congestive failure and atrial fibrillation have supervened, then thrombus formation is inevitable.

One of the hazards, and we see this quite often, of bringing a patient out of atrial fibrillation and congestive failure, is that in doing so the circulation is improved and thrombi which have formed are mobilized and go to the periphery, either cerebral emboli or pedal emboli, or more likely, to spleen and kidney. This patient's first cerebral episode occurred after I saw him in the office and increased his digitalis and gave him a diuretic.

I might well have caused the first episode by improving his circulation somewhat. That of course is the same hazard that exists in converting a patient from atrial fibrillation to sinus rythm, with the added hazard of a functioning atrial myocardium, and it would be mentioned that in almost all of these cases we see a recurrence of myocarditis and frequently endocarditis. The endocardial lesions themselves cause small inflammatory vegetations on the valves which can be the source of small emboli. Another source of emboli in these cases is S.B.E. Bacterial vegetations on the mitral or aortic valve could cause this patient's terminal illness; but with the many findings that he had such a lesion would probably go undiagnosed. A patient who has had as much congestive failure as this patient had over a period of time, does not as a rule develop S.B.E.

Other mechanisms that could have produced the terminal illness — I won't go into anything that isn't vascular — are, asystole, produced either by over-digitalization, with heart block and Adams-Stokes syndrome, could produce cerebral episodes particularly like the first one, but it is difficult to see how it could have accounted for the terminal episode. Also, one thing that is rather far-fetched, but perhaps should be mentioned, is that he could have had a giant thrombus in the left atrium which would intermittently occlude the mitral orifice. This is sometimes diagnosed ante-mortem and on occasion is associated with a definite cerebral lesion with hemiplegia.

In summary, it is my opinion that this patient had a rather fortunate evolution of his disease and that he ultimately succumbed to repeated cerebral emboli.

Dr. Saul Appel:

The cardiac catheterization was done when the patient was in relatively good shape. We had seen him a week before and his heart rate was well controlled by the time catheterization was performed. He was adequately digitalized. There was no definite evidence of tricuspid insufficiency, although the pressures in the right atrium and right ventricle were elevated, specially the end diastolic pressure, which indicates that he was in left sided heart failure.

Now the data that Dr. Verosky calculated out on the basis of right heart and left heart catheterization, were slightly affected by technical factors, that is, damping. However, there was very good evidence that the man had a significant aortic insufficiency, with, we weren't able to prove hemadynamically, significant aortic stenosis. His pulmonary vascular resistance was definitely elevated, 700 dyne seconds cm. whereas the normal is anywhere from 50 to 250. That is certainly elevated, although not as high as some of the chronic rheumatics that we have seen.

The cardiac output was greatly diminished. He had an output of 1.6 liters per minute per liter square, whereas the normal is about twice as much; and his systemic arterial venous oxygen difference was greatly elevated, 10 vol. %, instead of a normal which is half as much, indicating a marked congestion in the periphery with peripheral extraction of oxygen being very high, as in most cases of a low out-put heart failure.

As Dr. Logsdon said, the catheterization data wouldn't make very much difference in this man's final story, because he was a very severe chronic cardiac, he had been in failure most of the time the last eight years of his life, eight out of 33 years, and he had suffered a probable cerebral

embolus in 1954 and another one in August of 1959 just a month before he was catheterized. He was on anticoagulants after the second cerebral embolus.

However, in patients like this who are class IV cardiacs and for whom the prognosis is hopeless, we feel that it is worth catheterizing them if there is any chance they might improve and come to surgery. It is true that the risk for surgery in such cases is terribly high. On the other hand, when one makes such complete physiological study, one obtains a very strong opinion about the prognosis.

In addition, we have a patient here who said he was willing to be a guinea pig, which of course we wouldn't seriously entertain; but if we have a patient with the attitude that if anything can be done he is willing to go through with it, then you are willing to try and do the best you can. We don't feel that the catheterization had anything directly to do with his demise.

It is true that during the procedure, if there are thrombi, one might possibly dislodge a thrombus and form another embolus, but that should have been evident within the period of catheterization, or next day. In a man who has at least two emboli, as Charlie said, chances are that he had a lot more that were never recognized because they never hit a structure like the brain.

There is still one possibility that may have increased the likelihood of a terminal embolus; when he left the hospital after the admission in August before the catheterization, he was put on anticoagulants. He was on 5 mg. of coumadin a day from the 10th to the 21st of August, which is within the therapeutic range.

When he left the hospital he was given no more coumadin because I saw him on the 11th of September, only three weeks later. He told me then that he was given medicine to thin his blood. I therefore asked him to bring in all his pills, and among them there was no anticoagulants. He had not been back to the cardiac clinic since his discharge three weeks before. Therefore, we might have deferred a catheterization until his anticoagulant therapy was resumed.

This problem comes up very often in treating patients who are on prolonged anticoagulants. What are you going to do when they have to have a dental extraction or surgery? We hospitalize them, discontinue the anticoagulant, give them a little vitamin K if something is urgent, and has to be done in the next day or so, and then following the surgery or the dental extraction, resume the anticoagulants.

The lapse of time there is approximately a week or less and in the experience of most people there is no increased incidence of thrombosis or embolization if the period off the drug is only a week or two. When the period the anticoagulant is stopped is for four weeks or five weeks or six weeks, then there is an increased tendency to thrombosis.

I agree entirely with everything Charlie has said about the course of rheumatic heart disease. Here is a man who exhibits it very well, the chronicity of the patient with mitral disease and an aortic lesion which was not his chief lesion. It is true that with aortic disease, and this is mainly a hemodynamic lesion, the course is much more rapid until death.

Dr. E. S. Crossett:

One of the questions that came up about cardiac catheterizations is the indications for doing them. I agree with Dr. Logsdon that the diagnosis in this case is perfectly apparent. From a practical standpoint there was little reason for doing a cardiac catheterization. The only reason that I personally want to do catheterizations in patients who are remotely or actually being considered for surgery on the left side of the heart, is to measure their pulmonary resistance.

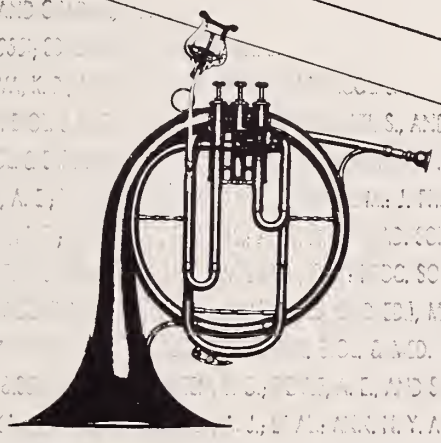
I think that this business of pulmonary resistance is something that the average doctor does not hear about. It is very important in the surgical treatment of congenital or acquired heart disease.

If the lungs are congested from overflow from either ventricular or atrial septal defect, or anomalous pulmonary drainage, where more blood than normal flows through the lungs as a result of these anomalies, or if the lungs are congested from backing up of blood as a result of mitral valvular disease, then certain changes over a period of time will take place in certain people's lungs.

These changes consist first of spasm of the percapillary arterioles in the lungs, and then as time goes on, in certain individuals, but not all individuals, — for some reason it is just a selective disease — these precapillary arterioles not only have spasm but they actually have organic thickening of the walls and thickening of the intima so that they become organically obstructed to the flow of blood.

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Now this is a protective mechanism of the lungs to prevent the capillary beds from being congested with blood. I have no proof that it is the same mechanism in acquired and congenital heart disease that causes these changes, but I think that it does. It just prevents blood from congesting the capillaries and entering into the alveoli.

Well, it is important for the surgeon to know before the surgery, whether or not the changes in the precapillary arterioles are on the basis of spasm, which is reversible, or on the basis of actual irreversible organic changes, because, if it is on the basis of organic changes, then correcting the heart lesion will not cure the patient.

He still has an obstruction to the flow of blood in his lungs. Most of them die during surgery, and the ones that don't die are helped very little by the surgery.

Status of Arterioles

In order to determine the status of the arterioles in the lungs, if you will put a catheter into the pulmonary artery, measure the pressure, find it is extremely high, probably equal to systemic pressure, then let the patient breathe oxygen for a period of five to ten minutes, we use ten minutes, and then remeasure the pressure. As a rule if the obstruction is due to spasm, the pressure in the pulmonary artery will drop to some degree.

If it is an organic change that is irreversible, it will not drop. Actually, in the patients that we have had the pressure has gone up after breathing oxygen, and every one of those except one has died when we operated. That is the only reason for doing a cardiac catheterization on this patient.

As far as the data obtained from the left heart and so on, it's interesting, but from the practical standpoint, at least at the present status of our knowledge, I see no value in it. But I think that any time you can collect data and make a record of it you ought to do it, because some day it may be of some value to you if you look back through your cases.

Cardiac Surgery

Now then the indications for cardiac surgery in a patient who is severely ill with acquired valvular disease: so far we have not operated on any aortic insufficiencies. The reason is that no one has devised a really good operation. A few procedures in real desperate cases I think are worth a try, such as removing one of the valve cusps of the aortic valve and making a bicuspid valve out of it. Another is to sew a piece of Ivalon sponge onto one of the valves so it occludes the opening and perhaps will prevent regurgitation. But these are desperate procedures, and I think they should be reserved for those real far advanced dying cases at the present time just as a last hope for them.

Now as far as your mitral stenosis and insufficiency, we all know that mitral stenosis is very well treated by surgery. Our results are good and it is a worthwhile operation. Where there is stenosis and insufficiency combined, and there is a group of cases in which there is only insufficiency. We have done about 11 procedures on acquired valve disease — nine procedures, on the left side of the heart, 11 procedures including two congenitals, but in mitral insufficiency, the results are not good, according to people around the country.

We have not been disappointed too greatly. Some of them have residual murmers, some of them are hard to evaluate as far as symptoms are concerned. The first case that we did, for instance, was a woman who had had ascites for a year, she had had three episodes of ascites, a big liver, ankle edema and so on. We operated on her and put an Ivalon prosthesis in where her posterior valve had been destroyed by rheumatic fever.

Post-operatively she had no murmur, she survived the procedure without any trouble except that she had an air embolus which caused cerebral symptoms that cleared up in three or four days. She became able to take care of a family of three or four children, doing so without symptoms.

She now has a systolic murmur, about a grade II systolic, but no cardiomegaly, no enlarged liver, and is a perfectly happy woman. If you can get results like that, treatment of mitral insufficiency is worth a try, and we usually take the pretty far advanced cases. There are others which have been improved but still have residual murmurs and so on, so you can't conclude that this treatment is very good, it is just worth a try.

Dr. Logsdon mentioned the fact that a seriously ill patient like this will die of a cardiac arrest often from the anesthesia. It is absolutely true, we have had two deaths and both of them died right after the anesthetic was given, from a cardiac arrest and we were never able to resuscitate their hearts and you can't blame anything for

that except poor selection of patients, and with experience I think we will begin to select our patients a little better.

Cause of Death

Now as to the cause of death in this patient, I think that possibly a needle was put through his left auricle to measure his left auricular pressure and may have precipitated a clot. The other possibility to me is a sub-acute bacterial endocarditis with a vegetation breaking off. My first guess is that he had S.B.E. as well as these other things and a vegetation broke off, but I can only guess about it.

One of the things that was brought up was tying off the atrial appendage to prevent clots. The only death that I have had from a mitral stenosis, which was a closed mitral stenosis operation in El Paso, was a patient who had had emboli so that he had a gangrenous leg. He was unconscious when I operated on him. Post-operatively about his sixth or seventh day he developed a thrombus where I tied off the appendage. It plugged up his mitral valve and killed him. I really don't think that tying off the atrial appendage is much value, particularly in a case where you can't do anything but tie off the appendage.

Dr. Logsdon:

I would like to say two things about anticoagulant therapy in this type of patient. I wouldn't argue too much about it because much of it is a matter of opinion. One, a patient of this kind with congestion of a good many organs, with chronic liver disease, is a patient very difficult to control on anticoagulant therapy, and controlling him here at the out-patient department is almost impossible. Anticoagulant therapy is something that a man has to be on every day and I can't control patients in my cardiac clinic because I don't see them but once a week.

In the second place, it may not even be a good procedure at this stage of the game. In fact, I think it is a definitely dangerous procedure. If a patient is anticoagulated and throws an embolus, wherever he throws it he is going to get in a great deal of trouble because of hemorrhage. Once a patient has thrown an embolus from his left atrium, we have no idea how many more he has or when they'll blow.

It seems to me that if we are going to start anticoagulant therapy on these people it should be started early, way back in 1942. We couldn't have in 1951 because he was even more ill then than now, when he died. Some cardiologists put their patients on anticoagulant therapy when they go into atrial fibrillation. That might be a safe procedure, but after they have started throwing emboli it is exceedingly dangerous. It will convert small emboli phenomena into very tragic ones in a hurry.

Clinical Diagnosis: Rheumatic Fever

Dr. Logsdon's Diagnosis: Repeated cerebral emboli, mitral insufficiency.

Pathological Diagnosis: 1. Mitral insufficiency, rheumatic type, of extremely long standing, associated with relative insufficiency of all valves. 2. Extreme cardiac hypertrophy and dilatation. 3. Myocardial scarring in apex. 4. Acute rheumatic myocarditis. 5. Acute encephalomalacia, probably embolic.

Pathological Discussion: Dr. Bornstein:

The external examination of this body was not remarkable. The main findings were in the thorax. The pleural cavities, amazingly enough, were free of fluid and adhesions. The pericardial sac was tremendously dilated, the apex being at the eighth rib in the lateral clavicular line. The pericardial sac was completely obliterated.

There was no gross evidence of any damage or injury from the preceding catheterization. The heart was markedly hypertrophied and weighed 750 grams. The myocardium was reddish-brown and firm except in a thinned out area in the apex of the left ventricle. The myocardium in the right side measured 12 mm. This represents hypertrophy of the right ventricle and 22 mm. on the left side, which is not too much of a hypertrophy.

The valves of the right side of the heart were anatomically normal but functionally incompetent. The heart was enormous in size, larger ever than would appear from the weight, and this was due to the enormous enlargement of both atria which took up about 50 percent of the size of the heart.

Main Lesion

The main lesion was one of the mitral valve. The mitral valve (Fig. 1) measured 10 cm. across. On inspection they showed total fusion of the valve leaflets, forming nearly immobile valve ring

with obvious insufficiency. On inspecting the inferior surface of the mitral valve (Fig. 2) one saw marked shortening of the papillary muscles and thickening of the chordae tendineae. The aortic valve measured seven cm. across and showed some thickening of the cusps but was essentially anatomically normal. Examination of the artia failed to reveal any mural thrombi. However, a few mural thrombi were attached to the endocardium of the left ventricle in the region of the thinning out previously mentioned.

There were numerous old infarct scars in the spleen and both kidneys. The brain showed softening of the left hemisphere, with foci of xanthochromic discoloration and sectioning showed numerous hemorrhagic foci in the cortex suggestive of recent infarction.

Microscopic examination in addition revealed mild pulmonary edema and some bronchopneumonia. The microscopic examination of the heart revealed scarring and foci of myocarditis including Aschoff bodies.

Several questions arise in interpreting this lesion. Basically this is a pure mitral valve lesion. The heart became decompensated and mural thrombi were formed, cerebral embolization, coma and bronchopneumonia ensued which produced death.



Figure 1

Role of Myocarditis

It is more difficult to evaluate the role of the myocarditis. It is true that patients with valvular lesions who have an even course on digitalization and who then suddenly decompensate show large areas of acute rheumatic myocarditis. On the other hand, since cardiac surgery has been practiced on a larger scale, it has been common to find small foci of active rheumatic inflammation in the auricular appendages. It therefore becomes questionable how much importance one should attach to the presence of active rheumatic foci in interpreting the course of the disease.



Figure 2

The mural thrombi at the thinned out area are obviously secondary in type, the thinning out being due to previous emboli entering the coronary arteries. The case is unusual inasmuch as it presents a pure mitral insufficiency with all other changes being secondary to this lesion. It is also the first time that we have the opportunity to discuss a case with complete catheterization and evaluate a mitral heart not only as a medical, but also as a surgical problem.

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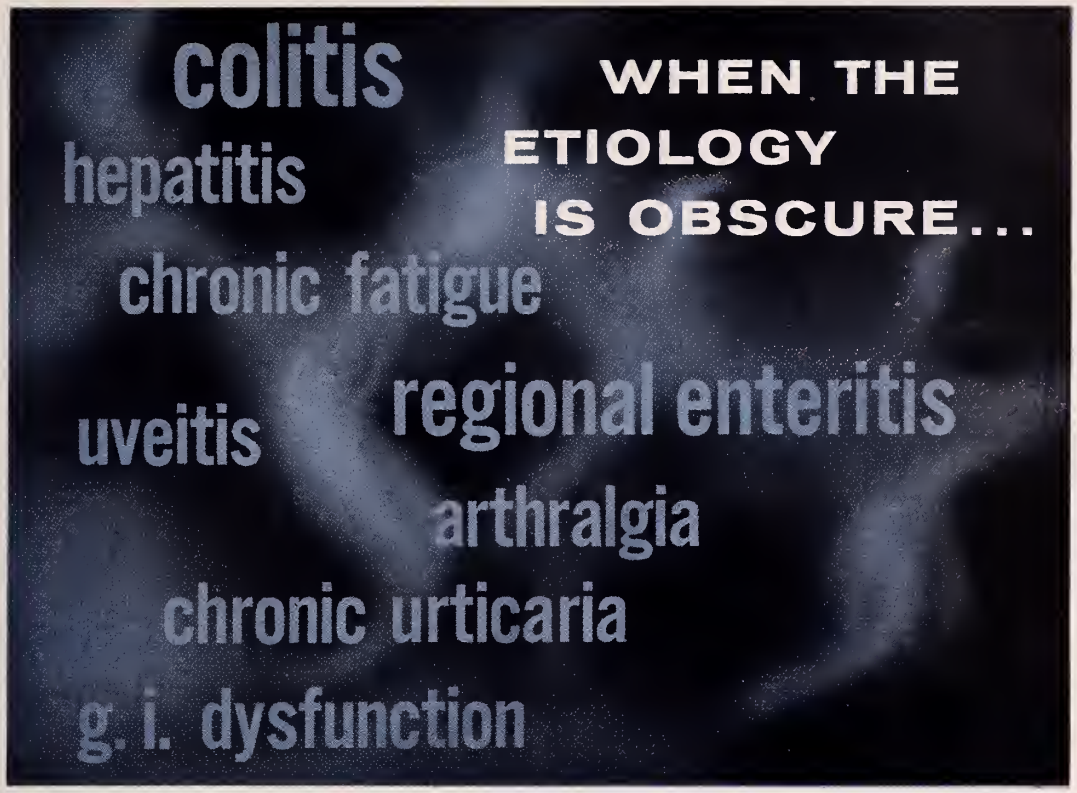
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1. Webster, B.H.: Am. Pract. and Dig. of Treat., *9*:897 (June, 1958). • 2. D'Antoni, J.S.: Am. J. Trop. Med. and Hyg., *29*:269 (May, 1949). • 3. Rinehart, R.E., and Marcus, H.: Northwest Med., *54*:708 (July, 1955). • 4. Elsdon-Dew, R.: S. Afr. Med., *32*:89 (Jan., 1958). • 5. Cook, J.E., Briggs, G.W., and Hindley, F.W.: Am. Pract. and Dig. of Treat., *6*:1821 (Dec., 1955). • 6. Farfel, B.: Am. J. of Gastroenterology, *32*:620 (Nov., 1959). • 7. Eisert, J., Hannibal, J.E., and Sanders, S.L.: New Eng. J. of Med., *261*:843 (Oct. 22, 1959). • 8. McHardy, G.C.: Gastroenterology, *30*:535 (1956). • 9. Moan, J.C.: Am. J. Trop. Med. and Hyg., *6*:499 (May, 1957). • 10. Babione, R.W., and Moan, J.C.: (to be published). • 11. Babione, R.W.: (to be published). • 12. Perkins, J.G.: U. of Oregon Med. School, Mar. 19-20, 1959.

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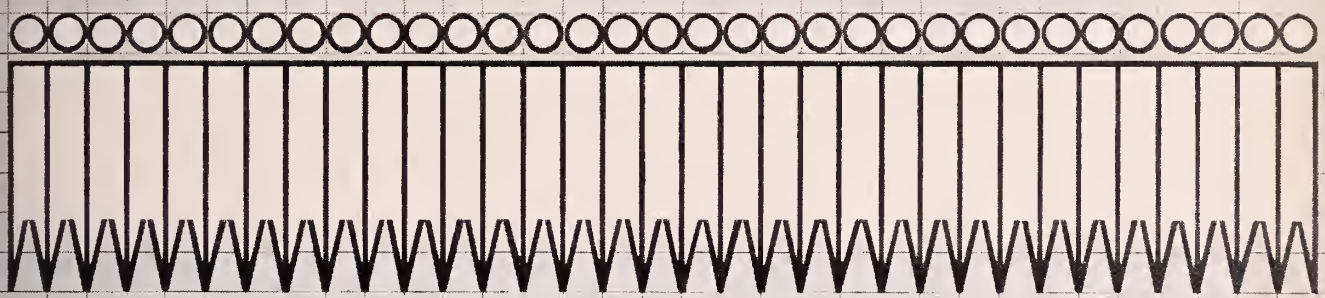
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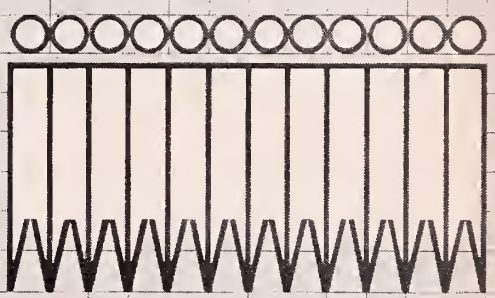
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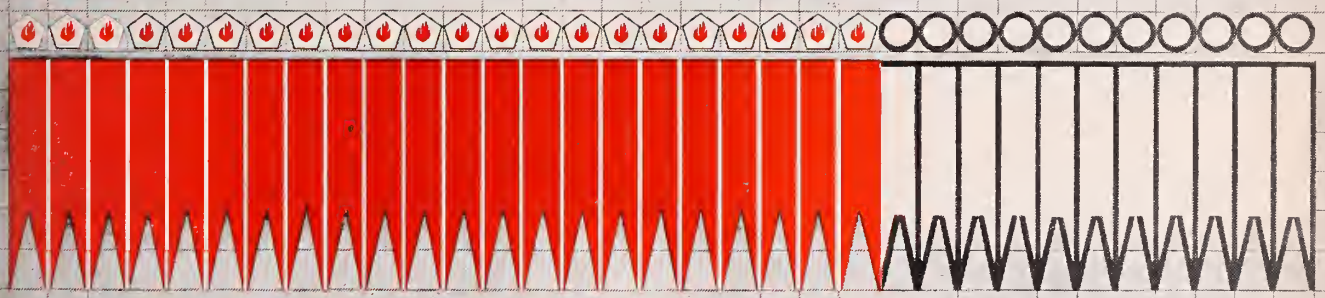
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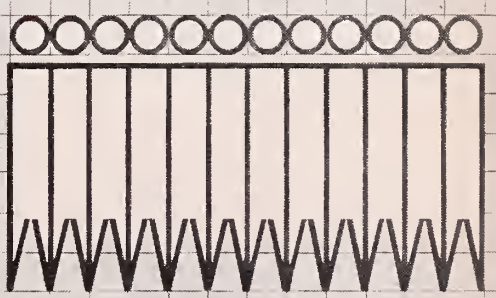
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1. Boland, E. W., and Headley, N. E.: Paper read before the Am. Rheum. Assoc., San Francisco, Calif., June 21, 1958.
2. Bunim, J. J., et al.: Paper read before the Am. Rheum. Assoc., San Francisco, Calif., June 21, 1958.

*Cortisone, prednisone and prednisolone.

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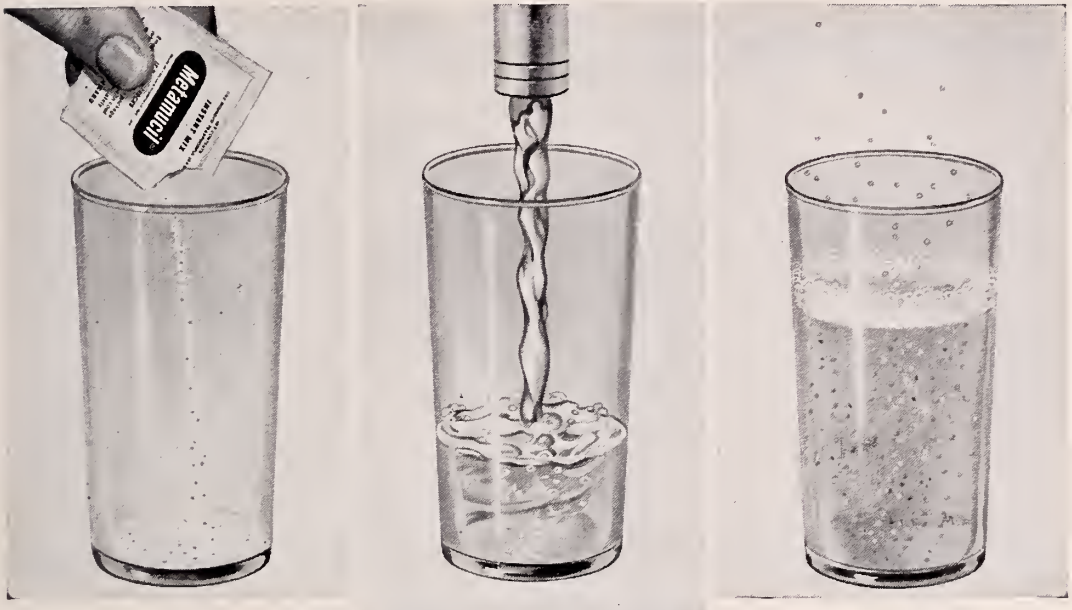
1. Spies, T. D.: The Influence of Nutritional Processes on Aging, South. M. J., *50*:216, 1957.

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REFERENCES: 1. Montero, A. C.; Rochelle, J. B., III, and Ford, R. V.: New England J. Med 260:872 (April 23) 1959. 2. Fuchs, M.; Bodi, T., and Moyer, J. H.: Am. J. Cardiol. 3:676 (May) 1959. 3. Fuchs, M., and others: Monographs on Therapy 4:43 (April) 1959. 4. Montero, A. C.; Rochelle, J. B., III, and Ford, R. V.: Am. Heart J. 57:484 (April) 1959. 5. Rochelle, J. B., III; Montero, A. C., and Ford, R. V.: Antibiotic Med. & Clin. Ther. 6:267 (May) 1959. LITERATURE AVAILABLE ON REQUEST

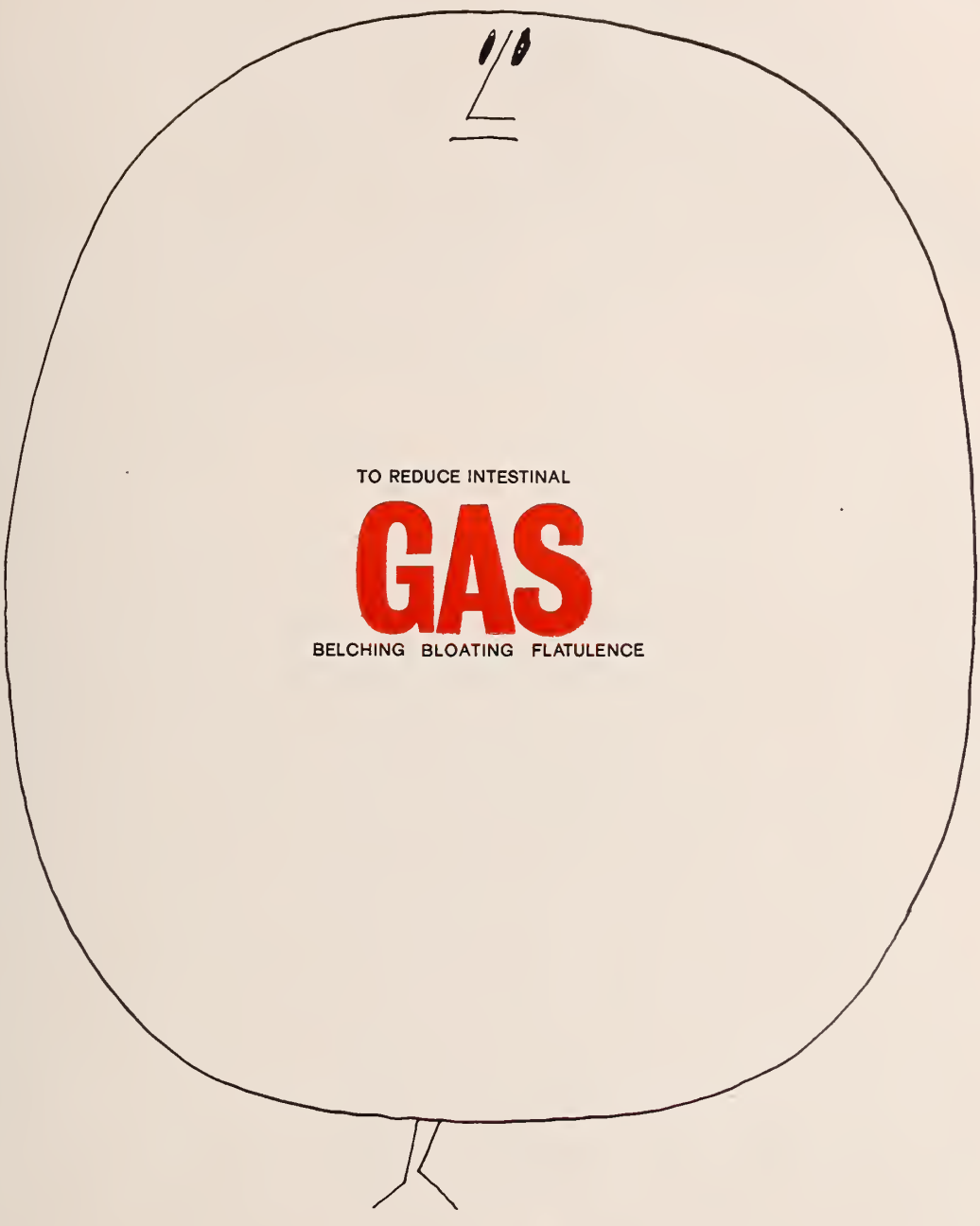
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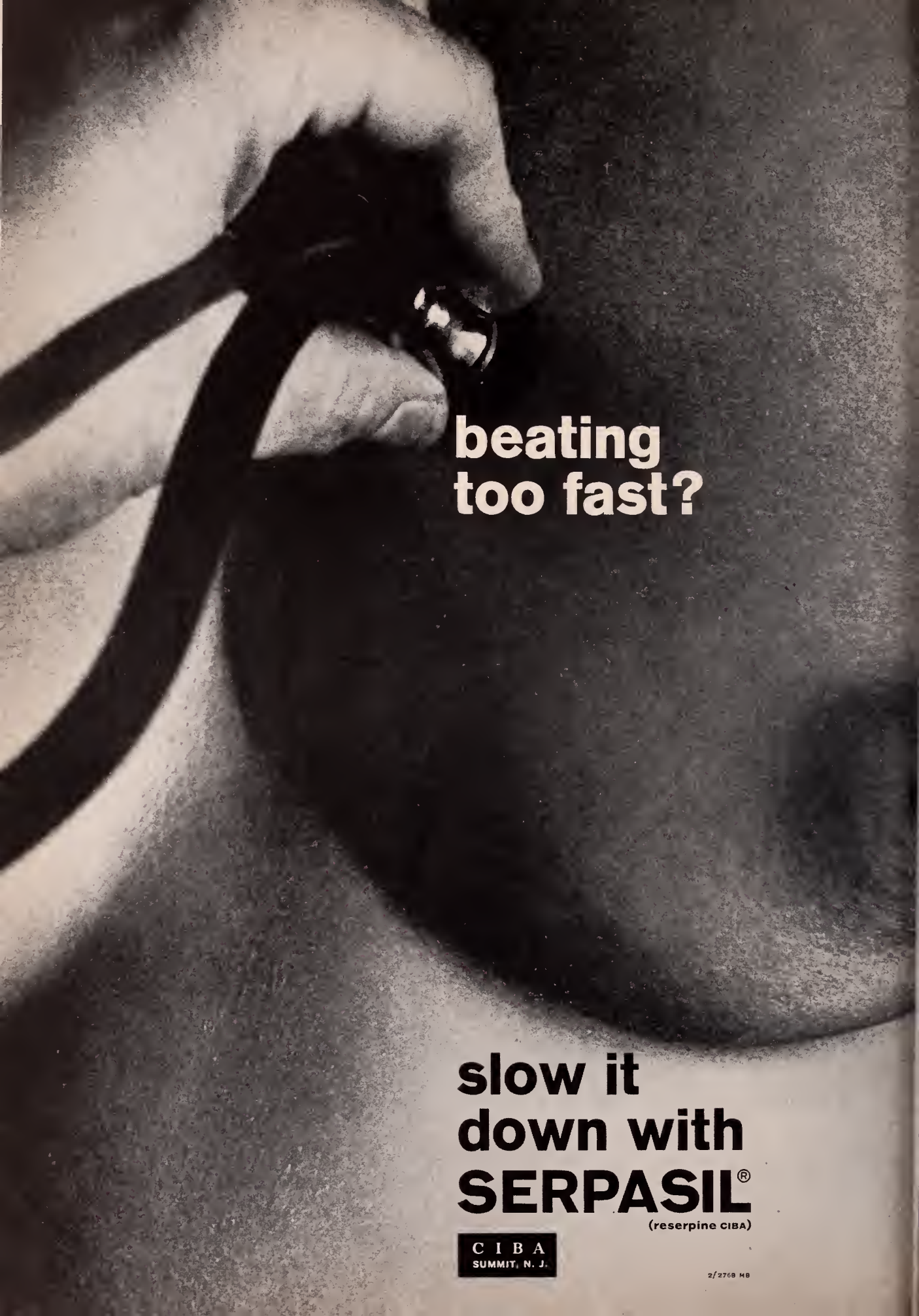
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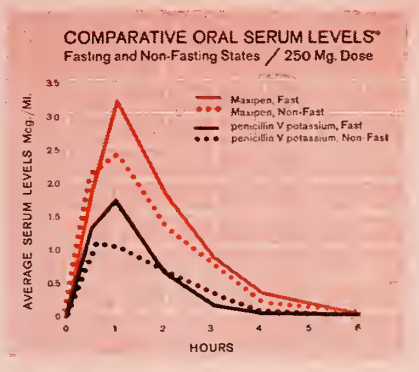
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Coming Meetings

Texas Orthopaedic Association, Annual Meeting, Hilton Hotel, Fort Worth, April 11, 1960.

Arizona Medical Association, 69th Annual Meeting, Safari Hotel, Scottsdale, Arizona, May 4-7, 1960.

New Mexico Medical Society, Annual Meeting, Western Skies Hotel, Albuquerque, May 8-14, 1960.

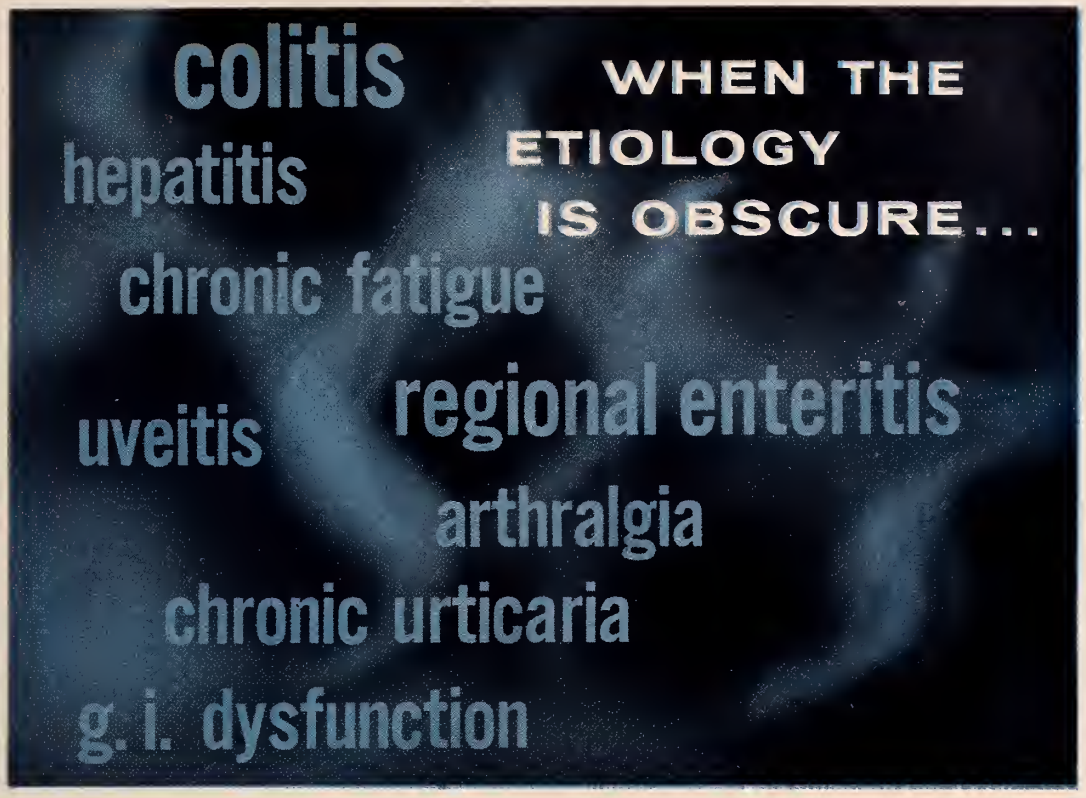
Postgraduate Course, Dermatology for General Practitioners, University of Colorado Medical Center, Denver, July 14-16, 1960.

Postgraduate Medical Assembly of South Texas, Shamrock Hilton, Houston, July 18-20, 1960.

Postgraduate Course in Pediatrics, University of Colorado School of Medicine, The Stanley Hotel, Estes Park, Colorado, Sept. 1-6, 1960.

Southwestern Medical Association, 42nd Annual Meeting, Hotel Hilton, El Paso, Oct. 20-22, 1960.

Southwest Obstetrical and Gynecological Society, Annual Meeting, Riviera Hotel, Las Vegas, Nev., Nov. 7-8, 1960.



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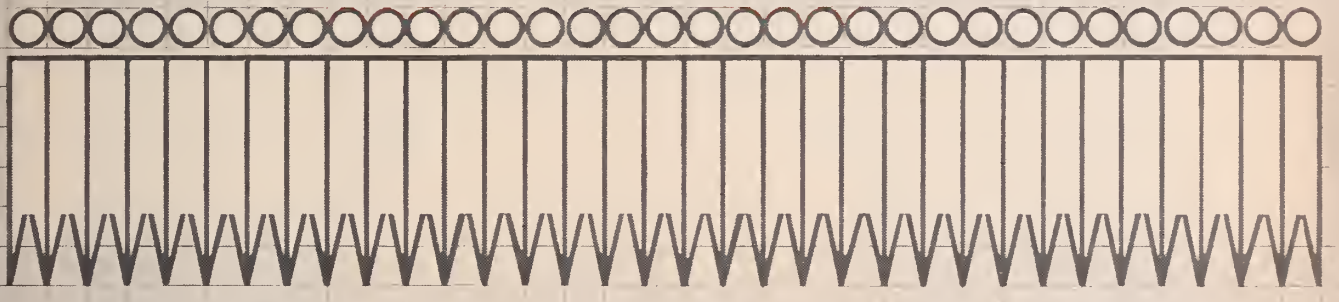
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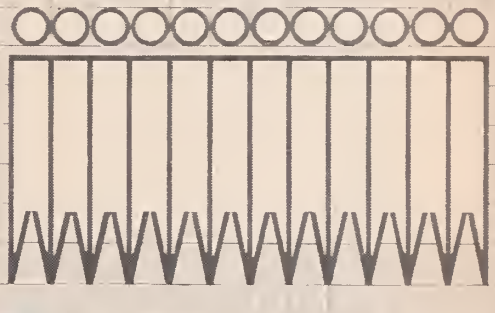
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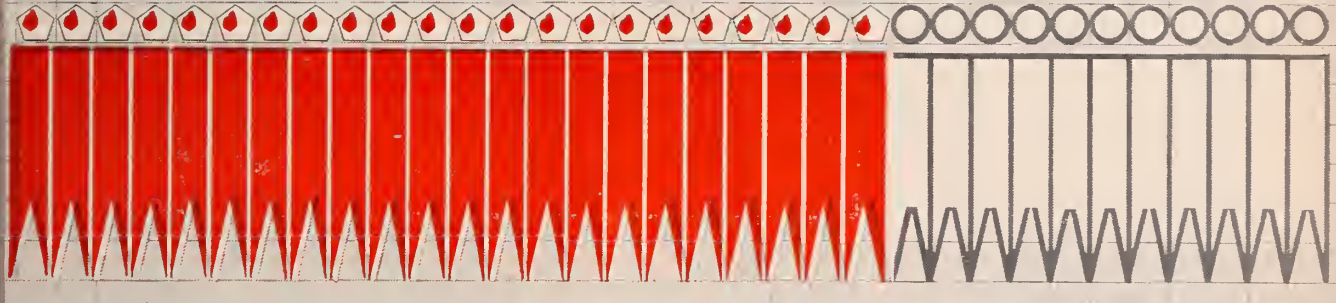
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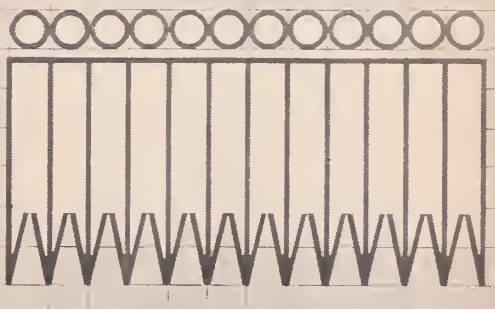


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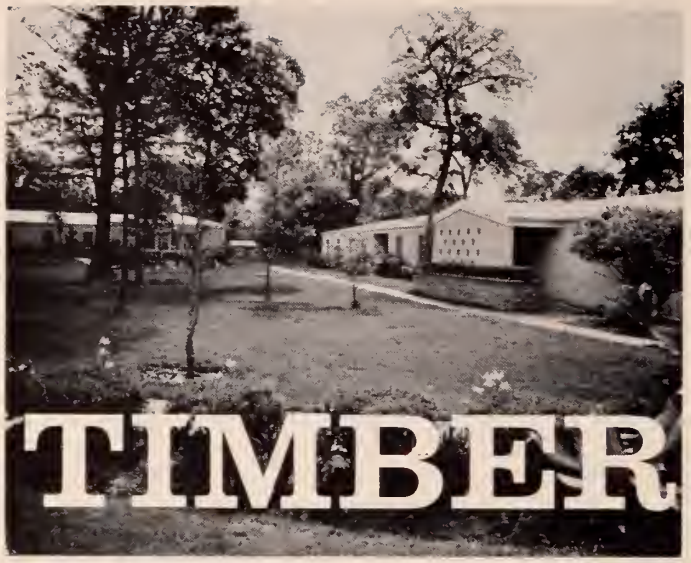
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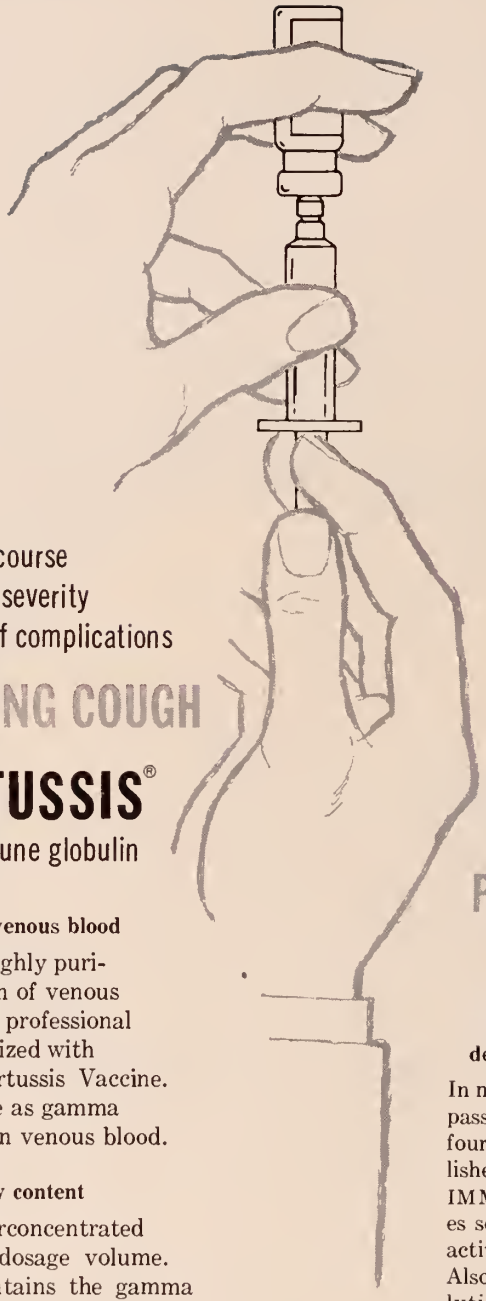
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SOUTHWESTERN MEDICINE

VOL. XLI, NO. 4 APRIL, 1960

New Mexico Medical Society to Hold 78th Annual Meeting in May in Albuquerque

Plans have been completed for the 78th annual meeting of the New Mexico Medical Society, May 8 to 14, in the Western Skies Hotel in Albuquerque, N. M.

Speakers will be Dr. Schuyler G. Kohl, Brooklyn, N. Y., Associate Professor of Obstetrics and Gynecology and Assistant Dean at the State University of New York's Downstate Medical Center; Dr. Bob Robins, Camden, Ark., member of the Board of Trustees, American Medical Association; Dr. Richard L. Day, Pittsburgh, Professor of Pediatrics at the University of Pittsburgh Medical School; Dr. Jerome Hilger, Minneapolis, Professor of ENT at the University of Minnesota Medical School; Dr. David Post, Albuquerque; Dr. Randolph Seligman, Albuquerque; Dr. Roy Goddard, Albuquerque, Director of Pediatric Research for the Lovelace Foundation for Medical Education and Research;

More Speakers

Dr. Jerome Hilger, Minneapolis; Dr. Albert W. Egenhofer, Santa Fe; Dr. Jack Mosier, Albuquerque; Dr. Joseph L. Hollander, Philadelphia, Professor of Medicine at the University of Pennsylvania Medical School; Dr. John L. Otto, Galveston, Professor of Neuro-Psychiatry at the University of Texas Medical Branch at Galveston; Dr. Frank Krusen, Professor of Physical Medicine and Rehabilitation at the Mayo Foundation and Special Assistant for Health and Medical Affairs to the Director of Vocational Rehabilitation, Department of Health, Education and Welfare;

Dr. Denton Cooley, Houston, Associate Professor of Surgery at Baylor University Medical School; Dr. John R. Betson, Albuquerque, Lovelace Clinic; Dr. Louis H. Winer, Los Angeles, Clinical Professor of Dermatology at the University of California at Los Angeles; Dr. Benson Bloom, Albuquerque, Director of Professional Services at the Veterans Administration Hospital; Dr. Guy E. Rader, Albuquerque; Dr. John C. Murphy, Albuquerque, Chief of the Dermatological Section at the Lovelace Clinic;

Still More Speakers

Dr. Winslow Bashe, Columbus, Ohio, Director of Communicable Disease Division of the Ohio State Health Department; and Dr. John Colbeck, Vancouver, B. C., Chief of Service on Pathology at Shaughnessy Hospital.

Officers of the Society are Dr. Lewis M. Overton, Albuquerque, President: Dr. Allan L. Haynes, Clovis, President-Elect; Dr. William Badger, Hobbs, Vice-President; and Dr. Thomas L. Carr, Albuquerque, Secretary-Treasurer.

Program

Sunday, May 8

Council Meeting, Territorial Room

Monday, May 9

8:30 A.M. First Indoctrination Course for New Members
La Mina Room

MEETINGS

Tuesday, May 10

8:30 A.M. House of Delegates
La Mina Room

6:30 P.M. Cocktail Party for Officers, Delegates, Speakers and their Wives

7:30 P.M. Banquet for Officers, Delegates, Speakers and Wives
Address: Bob Robins, M.D., Camden, Ark., American Medical Association Board of Trustees, "The New Look in Medical Practice"

Wednesday, May 11
General Meeting
Sandia Room

Presiding: James C. Sedgwick, M.D., Immediate Past President, N. M. Medical Society

8:45 A.M. Call to Order
Invocation: Paul Calhoun, Pastor, Immanuel Presbyterian Church, Albuquerque
Welcome: Maurice Sanchez, Chairman Albuquerque City Commission
Welcome: Omar Legant, M.D., President Bernalillo County Medical Association

9:00 A.M. Presidential Address:
Lewis M. Overton, M.D., Albuquerque, President, New Mexico Medical Society

General Scientific Session No. 1
Sandia Room

Presiding: Lewis M. Overton, M.D.
Co-Chairman: Earl B. Flanagan, Jr., M.D., Carlsbad

9:30 A.M. "New York Cerebral Palsy Study"
Schuyler G. Kohl, M.D., Associate Professor Ob-Gyn, and Assistant Dean, State University of New York, Downstate Medical Center, Brooklyn

10:00 A.M. "Bilirubin and Jaundice Mechanisms in Infants"
Richard L. Day, M.D., Professor of Pediatrics, University of Pittsburgh Medical School, Pittsburgh

10:30-11:00 Recess to Visit Exhibits

11:00 A.M. To Be Announced

11:30 A.M. "Surgical Treatment of Hearing Loss"
Jerome Hilger, M.D., Prof. ENT, University of Minnesota Medical School, Minneapolis

12:00 Noon Specialty Luncheons as Arranged

Group Scientific Session A
La Mina Room

Session A-1—Problems of the Newborn

Presiding: Alvina Looram, M.D., Santa Fe, Director Child Health Division, Department of Public Health

Co-Chairman: Howard Smith, M.D., Roswell, President N. M. Obstetrical-Gynecological Society

2:00 P.M. "The Maternal and Infant Mortality Committee of the New Mexico Medical Society"
David Post, M.D., Albuquerque

2:30 P.M. "Obstetrical Aspects of the Problem in New Mexico"
Randolph V. Seligman, M.D., Albuquerque, Chairman, Section

Dr. Cooley



Dr. Day



Dr. Kohl



on Obstetrics, Maternal and Infant Mortality Committee

3:00 P.M. "Pediatric Aspects of the Problem in New Mexico"
Roy Goddard, M.D., Albuquerque, Director, Pediatric Research, Lovelace Foundation for Medical Education and Research

3:30 P.M. Afternoon Break
Symposium: "The Improvement of Perinatal Morbidity and Mortality"
Presiding: Stuart W. Adler, M.D., Albuquerque, President, New Mexico Pediatric Society

3:45 P.M. "An Evaluation of Obstetrical & Newborn Services in the Community"
Schuyler G. Kohl, M.D., Brooklyn

4:15 P.M. "Respiratory Problems of Premature & Newborn Infants"
Richard L. Day, M.D., Pittsburgh

4:45 P.M. To Be Announced

5:15 P.M. Suggestions for Improvement in Maternal-Infant Mortality in New Mexico

Session A-2—Problems of the Special Senses
Sandia Room

Presiding: Jack Dillahunt, M.D., Albuquerque, President, New Mexico Ophthalmological Society
Co-Chairman: George Richardson, M.D., Roswell

2:00 P.M. "Tinnitus"
Jerome Hilger, M.D., Minneapolis

2:30 P.M. "External Diseases & Anterior Segment of the Eye"
Albert W. Egenhofer, M.D., Santa Fe

3:00 P.M. "Aphasia, Apraxia and Agnosia"
Jack Mosier, M.D., Albuquerque

3:30 P.M. Afternoon Break

3:45- 5:00 Panel: Discusson on Special Senses
Moderator: Arthur J. Fischer, M.D., Las Cruces
Discussants: Drs. Hilger, Egenhofer and Mosier

6:30 P.M. Cocktail Hour for All Registrants

7:30 P.M. Specialty Group Dinners
New Mexico Pediatric Society
New Mexico Radiology and Pathology Society
New Mexico Obstetrics and Gynecology Society

Thursday, May 12
General Scientific Session No. 2
Sandia Room

Presiding: Allan Haynes, M.D., Clovis, President-Elect, N. M. Medical Society

Co-Chairman: Andrew Babey, M.D., Las Cruces

8:45 A.M. Call to Order and Announcements

9:00 A.M. "Present Day Concepts in the Management of Rheumatoid Arthritis"
Joseph L. Hollander, M.D., Professor of Medicine, University of Pennsylvania Medical School, Philadelphia

9:30 A.M. "Uses and Abuses of Tranquilizers in Chronic Illnesses"
John L. Otto, M.D., Professor of Neuro-Psychiatry, University of Texas, Galveston

Dr. Krusen



Dr. Otto



Dr. Robins



10:00 A.M. "Rehabilitation Adds Life to Years"
Frank Krusen, M.D., Professor of Physical Medicine and Rehabilitation, Mayo Foundation, Special Assistant for Health and Medical Affairs to the Director of Vocational Rehabilitation, Department of Health, Education and Welfare

10:30 A.M. Recess to Visit Exhibits

11:00 A.M. to 12:30 P.M. Panel Discussion: Rehabilitation
Moderator: Lewis M. Overton, M.D.
Discussants: Drs. Hollander, Krusen and Otto

Afternoon Free

6:30 P.M. Cocktails—Four Hills Country Club

7:30 P.M. Dinner Dance (Social, no speeches)

Friday, May 13

General Scientific Session No. 3
Sandia Room

Presiding: W. E. Badger, M.D., Hobbs, Vice-President New Mexico Medical Society

Co-Chairman: R. C. Derbyshire, M.D., Santa Fe, President, New Mexico Section, American College of Surgeons

8:45 A.M. Call to Order and Announcements

9:00 A.M. "Open Heart Surgery"
Denton Cooley, M.D., Associate Professor of Surgery, Baylor University Medical School, Houston

9:30 A.M. "Cancer in Pregnancy"
John R. Betson, M.D., Lovelace Clinic, Albuquerque

10:00 A.M. "Tumors of the Skin, Benign and Malignant"
Louis H. Winer, M.D., Clinical Professor Dermatology, University of California at Los Angeles

10:30 A.M. Recess to Visit Exhibits

11:30 A.M. to 12:00 Noon Panel Discussion: "Cancer of the Breast"
Moderator: Martin Goodwin, M.D., Clovis, Secretary, N. M. Radiology & Pathology Society
Discussants: Drs. Cooley, Kohl, Winer, Otto

12:15- 1:45 P.M. Specialty Group Luncheons

Group Scientific Session B
Blue Room

Session B-1—Cardio-Pulmonary Problems in the Aged

Chairman: Carl H. Gellenthien, M.D., Valmora, President, N. M. Chapter, American College of Chest Physicians

Co-Chairman: Quentin J. Florence, M.D., Roswell, President, New Mexico Heart Association

2:00 P.M. "Pulmonary Problems of the Aged"
Benson Bloom, M.D., Director, Professional Services, V.A. Hospital, Albuquerque

2:30 P.M. "Cardiovascular Problems in the Aged"
Denton Cooley, M.D.

3:00 P.M. "Non-Visceral Chest Problems in the Aged"
Joseph L. Hollander, M.D.

3:30 P.M. Afternoon Break

3:45- 5:00 Panel Discussion: "Crippling Diseases of the Chest"
Moderator: Burgess Gordon, M.D., Albuquerque, Past President, American College of Chest Physicians
Discussants: Drs. Cooley, Hollander, Krusen & Otto

Session B-2—Problems of the Skin
La Mina Room

Presiding: George A. Waldriff, M.D., Albuquerque, President, Southwestern & Rocky Mountain Dermatological Societies

Co-Chairman: Earl Pace, M.D., Santa Fe

2:00 P.M. "Skin Problems in Pediatrics"
Guy E. Rader, M.D., Albuquerque

2:30 P.M. "Pigmented Lesions of the Skin"
Louis H. Winer, M.D.

3:00 P.M. "Allergic Skin Problems"
John C. Murphy, M.D., Albuquerque, Chief, Dermatological Section Lovelace Clinic

3:30 P.M. Afternoon Break

3:45- 5:00 P.M.
Panel Discussion: "Skin Problems"
Moderator: John J. Corcoram, M.D., Albuquerque

6:30 P.M. Open for Individual Cocktail Parties

7:30 P.M. Specialty Group Dinners
New Mexico Chapter, American College of Chest Physicians

Saturday, May 14

Symposium on Infectious Disease Control—La Mina Room
(Co-sponsored by the Public Health Committee of the New Mexico Medical Society & New Mexico Department of Public Health)

Co-Chairman: Roy F. Goddard, M.D., Chairman Public Health Committee, N. M. Medical Society

Co-Chairman: Stanley Leland, M.D., Santa Fe, Director, N. M. Department of Public Health

9:00 A.M. "The Problem of Infectious Disease Control"
Winslow Bashe, M.D., Director, Communicable Disease Division,, Ohio State Health Department, Columbus

9:45 A.M. "Hospital Programs"
John Colbeck, M.D., Chief of Pathology Service, Shaughnessy Hospital, D.V.A., Vancouver, British Columbia

10:30 A.M. Coffee Break

10:45 A.M. Movie: "Hospital Sepsis — A Communicable Disease"

12:15- 1:45 P.M. Luncheon

2:00 P.M. Panel: "The Public Health Team"
Moderator: John Mason, Santa Fe, D.V.M., M.P.H., Chief, Infectious Disease Division, N. M. Department of Public Health

3:00 P.M. Discussion: "What Can Be Done in New Mexico?"
Moderator: Howard L. Wilson, M.D., Los Alamos

4:00 P.M. Resume and Recommendations
Drs. Bashe and Colbeck

WOMEN'S AUXILIARY

Program

Tuesday, May 10

3:00 to 5:00 P.M. Coffee for State Officers, County Officers and Committee Chairmen
Suite 139: Hostess, Mrs. Martin Goodwin, President, Auxiliary to the New Mexico Medical Society

Wednesday, May 11

8:45 A.M. Opening Ceremonies of New Mexico Medical Society
Sandia Room

9:45 to 11:45 A.M. House of Delegates Meeting
Territorial Room

12:00 A.M. Luncheon — Pool Side
Speaker: American Medical Association Auxiliary Representative

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Dr. Loraine Orr Dutton

Dr. Loraine Orr Dutton, 61, El Paso, who came to El Paso in 1931, died Jan. 23, 1960.

He was a member of the American College of Allergists, American Academy of Allergy, Texas Society of Pathologists, American Assn. of Blood Banks, director of the clinical laboratories of Providence Memorial Hospital and R. E. Thomason General Hospital, and medical director of the Southwest Blood Bank in El Paso. He was a Past President of the Southwest Allergy Forum.

Dr. Neidich of Las Cruces Elected President of Southwestern New Mexico Medical Society

Dr. E. K. Neidich of Las Cruces, was elected president of the Southwestern New Mexico Medical Society at its annual meeting in Las Cruces, January 18.

Other new officers were Dr. Russell Lane, Silver City, vice-president; and Dr. William J. Hossley, Deming, secretary. The retiring president was Dr. Paul A. Feil of Deming.

Speaking at the meeting, which attracted 85 physicians and wives from southern New Mexico and El Paso County, was Harold J. Crasilneck, Ph.D., of Dallas, assistant professor of psychiatry at the University of Texas Southwestern Medical School in Dallas. Dr. Crasilneck spoke on "The Uses and Abuses of Hypnotism." He was presented an award by the Society for Clinical and Experimental Hypnosis in 1958 for writing the best paper in the world on hypnotism.

Born in New York

Born in New York City, Dr. Neidich received his B.S. from the University of Michigan and his M.D. from the University of Edinburgh, Scotland. He took his internship and residency in New York City and in 1941 began the general practice of medicine in Devonshire, England. He entered the Army in 1941 as a major and served with the Army Medical Corps from 1941 to 1946 with four years overseas duty in the European and North African Theatres of war. He emerged from the service with the rank of major.

Between 1947 and 1951 he did residency work in radiology in New York City and became a Diplomate of the American Board of Radiology in 1951. He began the practice of radiology that year in New York City and in 1953 moved to Las Cruces, New Mexico, where he is now a practicing radiologist.

He is a member of the American College of Radiology, the American Roentgen Ray Society and a past president of the Dona Ana County Medical Society. He has been a consultant in radiology at the Veterans Administration Hospital in Ft. Bayard and a consulting radiologist at the Hillcrest Hospital and Watts Clinic and Hospital in Silver City. He is a member of the Las Cruces Rotary Club. He and his wife have a son, Lawrence, 11, and a daughter, Judith, 6.

SOUTHWESTERN NEW MEXICO OFFICERS—Participating in the annual meeting of the Southwestern New Mexico Medical Society at Las Cruces, January 18, were, left to right, Dr. William J. Hossley, Deming, secretary; Dr. Russell Lane, Silver City, vice-president; Harold J. Crasilneck, Ph.D., Dallas, speaker; Dr. Paul A. Feil, Deming, retiring president; and Dr. E. K. Neidich, Las Cruces, new president. Dr. Crasilneck, who is assistant professor of psychiatry at the University of Texas Southwestern Medical School, Dallas, spoke on "The Uses and Abuses of Hypnosis."



THE PRESIDENT'S PAGE

Young Men of Medicine

(Continued)

By Russell L. Deter, M.D., *El Paso*
President, Southwestern Medical Association

In the last issue we discussed briefly our responsibility to the high school student who wants to study medicine, and the pre-medical student.

In this issue, we shall attempt to cover briefly the part we should play in the education, training and preparation of young doctors to practice medicine.

Taking my topics in order —

3. The Medical Student, Intern and Resident.

We should think of all three of these as different phases of medical education per se. The medical student is taking large intellectual bites of the science of medicine and is beginning to acquire a life long habit of self-initiated learning. In this phase we, as practitioners (to differentiate from full time professors), do not play too active a part. We should take every opportunity to enjoy their enthusiasm, visit with them, and regain some of that vitality so characterized by the enthusiastic medical student.

We must help them explore the magnificent new vistas opening up for them as they learn anatomy, physiology, etc., ad infinitum. We should never, at this optimum stage of training and development, bring up some of the unpleasant relations which sometimes exist between doctor and patient, or doctor and other doctors, and the transitory trials and tribulations of organized medicine. There is too much for them to assimilate without interjecting these unpleasant facts at this stage.

Medicine Should Be Fun

We should, as practitioners, emphasize and teach them that medicine should be fun and should be exciting; and, if it isn't, they are probably in the wrong field. We should, at this level, also impress on them that they should choose the specialty that they enjoy the most, not the one which might be the most remunerative. Whether it be in teaching, research or practice is of no importance, if they like what they are doing. Teach them that the young man who starts out to make money as a primary objective seldom does, but the young man whose primary objective is to render service can hardly help but make an adequate income.



Dr. Deter

They should be taught, somewhere along the way, that if they do not want to work they shouldn't hire out. It is pointless to study medicine and take intensive graduate training, and then go out and only take calls during day-time hours, none on Saturday or Sunday, and always be difficult to find. A doctor has only one commodity to sell and that is himself and his knowledge of medicine—he must go and be where his services are needed, and that is with his sick patient. Patients can be trying in their demands, but they are sick.

Same Philosophy

The intern and resident must be exposed to much of this same philosophy, but in addition they must also be taught the art of medicine and that is at the patient's bedside, in the operating room and in the out-patient clinic.

We must get away from the idea that interns and residents are there to take over some of the unpleasant duties of patient care, writing up charts, etc. The reason you have an intern and resident program is to turn out better trained doctors of medicine.

This goal cannot be achieved without your being there to give him the benefit of your experience. The intern or resident is not there to take over the care of indigents, he is there to learn how to become a better doctor of medicine.

4. The Young Doctor Starting Out in Practice.

We must lend him a helping hand when he gets started in practice and try to warn him of the pitfalls of professional relations with other doctors. We must help him in setting up fees commensurate with those being charged in our community.

Above all else, do not discourage him in new fields, or unexplored fields, in medicine. These are the young men who approach the mass of unsolved problems in medicine with that enthusiasm which comes from not knowing that all of these problems are insoluble. Every day some young man in medicine is finding a solution to these so-called "insoluble" problems. Because you have not achieved your goals, or solved the many problems of medicine, does not mean that they cannot be solved.

If you can't help in these projects, don't be a wet blanket. Console them in their failures, praise them their successes.

It's Time We Reevaluate Our Public Relations Program

By Sol Heinemann, M.D., *Carlsbad, N. M.*

Our present program of public relations is a program of expediency. It should be redefined and recognized for what it is, or else it will merely soften our changeover into socialized medicine. We have been trying for the past 10 years to give people a "good" opinion of physicians as a group. With each new problem that has been tossed at the medical profession, we have sought to soften the blow by good public relations, and solve the problem of the moment with the most expedient solution.

This solution is usually one that has ignored the principle involved, and has usually led us one step closer to putting the practice of medicine in the hands of bureaucracy. In short, we have been trying to come to terms with socialism and are moving closer and closer to socialism. It has been the experience of those who have worked on public relations programs that we have not done this well. Our present public relations programs themselves have not been too successful, inasmuch as our members are "too busy" to devote adequate time to a good public relations program.

Strategic Retreat

It becomes evident that private medicine can only survive under a system of Democracy that supports capitalism. We must decide if we should continue our strategic retreat with delaying actions,

or accept our duty as citizens in defending a capitalist society. As individuals we can only do the latter by becoming actively interested in politics and economics, as here is where the decisions are made.

At the risk of appearing trite, I would like to point out that the Magna Carta and the Constitution outlined basic principles for the freedom of the individual. These principles were based upon a system of capitalism; and where in these documents does one find expediency for the problems of the time in which they were written. They did not solve the imminent problems, but did outline the principles.

We should recognize that under the principle of a capitalistic economy we have survived and prospered. Under this same principle there is no use for or need for socialism in the field of medicine or in any other field. All economists today will admit that we are living under a "mixed economy". This is a nice way of saying we are already partly socialized. When one breaks down a socialistic economy, one finds that the government has obtained both political and economic powers. Capital is now under the control of the bureaucracy of government. Under this system medical care, jobs, and the productivity of the economy are dispensed to the individual by the government.

It is for these reasons that I feel that the medical profession should reevaluate its public relations policy. We have successfully refused to accept social security for physicians. While several inroads into our freedoms have occurred, we still are the largest group of people in this country who are the least socialized. It is therefore our duty to devote our efforts to leading this nation back to the principles of the capitalistic society that we profess to believe in. Unless a strong and united effort is made, this nation will continue down the road to socialism and medical care will be only part of the government program.

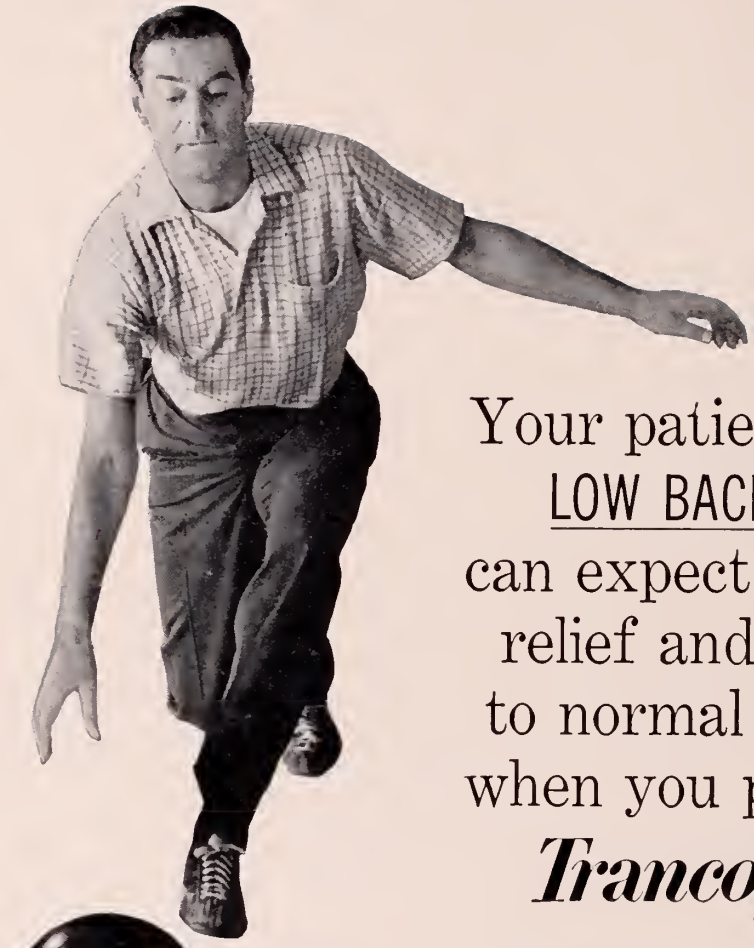
I feel that all doctors should read *The Capitalist Manifesto* by Kelso and Adler, for these authors have grasped the problem and come up with one solution. Their thesis is for capital to be decentralized and placed back into private hands, instead of being centralized in the hands of a bureaucracy.

Where other economists want to experiment with our way of life (all of these experiments have led us into a partially socialized economy) Kelso and Adler would like to reverse this trend. They would like to lead us back to a free competitive economy under the control of the citizens of the nation. One must admit that they have taken an old idea, i.e. capitalism, and are successfully defending its value in the present world, and its worth to the individual.

The basic question then appears to be that if the nation's economic power is in the hands of its citizens, there will be no problem of socialized medicine; but if the economy continues to pass into the hands of the government, socialization is inevitable in all fields. There can be no mixture of the principles of the two.

As a group, doctors should expend their efforts for clarification of the principles involved and furthering those same principles instead of trying to solve the problems as they arise, by the most expedient method. This would involve a strenuous public relations program, but one worthy of our efforts.

As a profession, we can use the power of our public relations department to publicize the problems and to educate the people about the principles involved. Using the A.M.A. as a nucleus, other groups may be induced to act as spearheads to beat a retreat from socialism. This could lead to a revitalization of our nation and might become a rallying point for other nations against communism. Even our allies are finding it difficult to see our differences with communism, when the ship of state is sailing more and more to the left.



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case profile.[1] A 42-year-old truck driver and mover injured his back while moving a piano. The pain radiated from the sacral region down to the region of the Achilles tendon on the right side. X-rays for ruptured disc revealed nothing pertinent. The day of the injury he was given Trancopal immediately after the physical examination. Although 100 to 200 mg. three times a day were prescribed, the patient on his own responsibility increased the dosage of Trancopal to 400 mg. three times a day. This dosage was continued for three days and then gradually reduced over a ten day period. During this time, the patient continued to drive his truck. The muscle spasm was completely controlled and no apparent side effects were noted. For the past six months, the patient has continued to take Trancopal 100 to 200 mg. as needed for muscle spasm, particularly during strenuous days.

Indications — *Musculoskeletal:* Neck pain (torticollis) / Ankle sprain, tennis elbow / Bursitis / Rheumatoid arthritis / Low back pain (lumbago, etc.) / Fibrositis / Myositis / Osteoarthritis / Postoperative muscle spasm / Disc syndrome. *Psychogenic:* Dysmenorrhea / Anxiety and tension states / Asthma / Premenstrual tension / Angina pectoris / Alcoholism.

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The Erythropoietic Hormone in Secondary Anemia.*

By Jack C. Postlewaite, M.D., *El Paso*

The use of cobalt in the treatment of various anemias has been widely studied.[1, 20] It has been shown that the primary effect of cobalt appears in the bone marrow in which the erythroid tissue and the number of mitotic figures are increased.[6, 13, 15] This effect is promptly manifested in the peripheral blood by the appearance of a marked reticulocytosis and subsequent increases in hemoglobin and in the number of erythrocytes.[21, 23]

The mechanism by which cobalt stimulates erythropoiesis has recently been clarified through the work of Goldwasser, Jacobson, Fried and Plzak,[24] who showed that the element increases the production of erythropoietin, the erythropoietic hormone. Cobalt is the only known therapeutic agent having this kind of activity.

Therapeutic administration of cobalt has been confined to the use of the inorganic salt, cobalt chloride. It has proved to be a relatively nontoxic agent in doses of 100 mg. or less per day. Where larger dosage is desirable, however, gastrointestinal side effects and other toxic symptoms have been reported which may preclude its use. This has led to a search for organic cobalt compounds which might prove to be therapeutically superior to the inorganic salt.

The present evaluation was undertaken to determine whether a new organic cobalt complex, Copoietin, was superior to cobalt chloride in clinical practice.

Materials and Methods

Fifty-four patients were treated using Copoietin-Ferrous, a new preparation comprising an organic cobalt complex with ferrous sulfate. Each sugar-coated tablet contained cobalt polyglucopyranose equivalent in cobalt content to the usual 15 mg. dose of cobalt chloride and, in addition, 100 mg. of exsiccated ferrous sulfate. Dosage was one tablet four times daily given with meals and at night before retiring.

There were seven males and 47 females in the series of patients chosen for study. Their ages ranged from 10 to 73 years. These patients were selected chiefly on the basis of presenting symptoms typical of anemia, including weakness, lassitude, fatigue, anorexia and irrtability.

The anemia was characterized as due to iron deficiency of nutritional origin in fifteen patients and resulting from chronic blood loss in an additional six. Twenty-five patients exhibited an anemia associated with infection or with inflammatory disease processes. Included in the series were seven patients having anemia associated with thyroid disease. One patient presented a typical hypoglandular syndrome with mild anemia.

Blood specimens for hematologic examination were obtained at the time of each patient's initial visit, or prior to the initiation of therapy with Copoietin-ferrous, and at each subsequent visit. The interval between visits varied between two weeks and several months, depending upon the patients' cooperativeness. Hemoglobin concentrations were determined photometrically and hematocrit determinations were performed by standard laboratory methods.

Results

The distribution of blood hemoglobin concentrations in 19 patients with iron-deficiency anemia, before and after treatment with Copoietin-ferrous, is shown in Table I. These anemias were characterized by hypochromia and slight microcytosis.

*The compiled statistics above were analyzed and prepared for printing by the research department of Lloyd Brothers, Cincinnati, Ohio.

Two patients were dropped from the series because of failure either to keep appointments or to take the medication according to prescribed directions.

In the remaining group of 19 patients, the average initial hemoglobin concentration was 11.7 ±0.62 grams per 100 cubic centimeters of blood. After treatment for periods ranging from 14 to 141 days, the average hemoglobin concentration had increased approximately 1.6 grams per 100 cubic centimeters to an average level of 13.4 ± 1.03 grams per cent. Before treatment was begun, hematocrits ranged from 34 to 43 per cent, with an average value of 39.0 ± 2.36.

After treatment with Copoietin-ferrous, the average hematocrit had increased to 42.7 ± 2.75 per cent, the range being from 37 to 46 per cent. The mean corpuscular hemoglobin concentrations (M.C.H.C.) of these patients were somewhat low initially, ranging from 27.9 to 32 per cent, with an average of 29.8 per cent.

The values of this index showed no significant change following treatment, ranging from 26.1 to 36.4 per cent, with an average on the low normal side (31.7 per cent).

TABLE I

Patients with Iron-deficiency Anemia

Patient No.	*Etiology*	*Duration of Therapy (days)*	*Hemoglobin (gm./100 cc.)*	
			Initial	*Final*
4742	Nutritional	141	11.2	14.0
764	Nutritional	14	11.7	12.4
337	Nutritional	60	11.7	12.8
4227	Nutritional	31	11.7	14.8
5194*	Chronic bleeding duodenal ulcer	124	12.0	13.0
5344	Menstrual blood loss	49	12.0	13.0
2938	Nutritional	91	11.3	12.4
4260	Nutritional	79	11.7	14.0
421	Nutritional	56	10.0	12.0
5205	Nutritional	20	12.0	12.0
5237	Nutritional	44	12.0	13.0
1595	Chronic bleeding duodenal ulcer	113	12.4	14.0
5239	Nutritional	78	11.2	12.0
128	Nutritional	104	12.4	15.3
3067	Nutritional	119	11.2	13.8
MLN	Menstrual blood loss	108	12.4	14.8
4058*	Nutritional	101	12.8	14.6
BR	Menstrual blood loss	120	11.7	13.0
908	Allergic purpura	69	11.5	12.8

*Male

Table II shows the distribution of blood hemoglobin concentrations, before and after treatment with Copoietin-ferrous, in 20 patients with anemia associated with infection or with inflammatory disease. Five patients were excluded from this series because of failure to keep their appointments or to take the medication as directed.

In the remaining group of twenty patients, before therapy with Copoietin-ferrous was initiated, the blood hemoglobin concentration ranged from 10.6 to 13.1 grams per 100 cubic centimeters, with an average of 12.0 ± 0.81. The hematocrits of these patients varied between 32 and 42 per cent, with an average of 38.6 ± 2.72. These anemias were characterized as normocytic with M.C.H.C. values ranging from 27.5 to 34.1 per cent (av. 31 per cent).

After treatment with Copoietin-ferrous for from 19 to 313 days, these patients' average blood hemoglobin concentration had increased 1.4 grams per 100 cubic centimeters (to 13.4 ± 1.26 gm./100 cc.). Excluding the two patients (4291 and P.S.) who failed to show an improvement, the average increase in blood hemoglobin concentration was 1.6 grams per 100 cubic centimeters.

This was accompanied by an increase in the average hematocrit to 41.5 ± 1.5 per cent (range 39-55 per cent), an average gain of 2.94 per cent. There was a small increase, also, in the average M.C.H.C. value to 32.3 per cent.

In a group of eight patients with anemia and thyroid disease or hypoglandular syndrome (2017), before therapy with Copoietin-ferrous was begun blood hemoglobin concentrations ranged from 8.6 to 12.8 grams, with an average of 11.2 ± 1.2 grams per 100 cubic centimeters. The data relating to these patients are shown in Table III.

TABLE II

Anemia Associated with Infection or Inflammation

Patient No.	*Diagnosis*	*Duration of Therapy (days)*	*Hemoglobin (gm./100 cc.)*	
			Initial	*Final*
5018	Chronic colitis, non-ulcerative	43	12.8	14.0
1248	Infectious mononucleosis	40	12.6	13.3
5152	Hepatitis	126	12.0	13.0
5159	Hepatocholangitis	90	12.0	12.8
515	Hepatitis, colitis	123	11.7	12.8
4811	Chronic pelvic infection	193	11.0	13.6
2347	Endometriosis	127	12.0	13.0
821	Chronic infection	313	13.1	14.8
4841	Amebic colitis	177	13.1	13.8
3651	Gastritis	164	11.7	14.0
100	Chronic tonsillitis	42	10.6	12.6
1086	Post viral pneumonia	309	11.0	13.0
1294*	Bronchitis, allergic and bacterial	68	11.8	17.7
4291	Gallstones	127	12.0	12.0
4609	Rheumatoid arthritis	19	11.0	12.6
5291	Palindromic rheumatism	42	12.8	13.3
5229	Rheumatoid arthritis	28	12.6	14.3
1107	Rheumatoid arthritis	21	12.6	13.1
5054	Rheumatoid arthritis	31	11.0	12.6
PS	Rheumatic chorea	68	12.8	11.7

*Male

TABLE III

Patients with Thyroid Disease

Patient No.	*Diagnosis*	*Duration of Therapy (days)*	*Hemoglobin (gm./100 cc.)*	
			Initial	*Final*
937	Hypothyroid	53	12.0	14.8
5091	Hyperthyroid	140	11.7	11.0
4855*	Hypothyroid	56	12.8	15.5
4708	Thyrotoxicosis	83	10.2	13.1
774	Hyperthyroid	98	8.6	13.0
3198	Hypothyroid	355	11.5	13.1
194	Hypothyroid	121	10.0	12.8
2017	Hypoglandular syndrome	85	12.8	12.6

*Male

Their hematocrits ranged from 25 to 44 percent (av. 37.4 percent) before treatment. In all but two patients the anemia was normocytic and hypochromic. The two exceptional patients exhibited marked microcytosis with M.C.H.C. values in the normal range.

After treatment for periods ranging from 53 to 355 days, six of the eight patients showed marked improvement in their peripheral blood picture. Their blood hemoglobin concentrations had increased by from 1.6 to 4.4 grams per 100 cubic centimeters (av. 2.87 gm./100 cc.), and their hematocrits had increased by from 2.0 to 13.0 percent (av. 5.0 percent). The two patients who failed to show improvement exhibited small decreases in both their hemoglobin and hematocrit values.

In general, this new cobalt complex was extraordinarily well tolerated. Only two patients complained of gastrointestinal distress despite the fact that therapy was continued in some cases for as long as 18 to 45 weeks. After treatment for 17 weeks, one patient developed a rash which disappeared promptly when the medication was stopped. The remaining 51 patients had no side effects and no evidence whatsoever of toxic reaction was observed in any patient.

Discussion

Our series of cases illustrate the two primary types of anemias commonly seen in general practice. The iron-deficiency group is typical in that most of the patients are females in whom the anemia may be "nutritional" in origin or may be thought of as due to lack of sufficient iron absorption to offset menstrual loss. These anemias are hypochromic and sometimes microcytic.

The remainder of the patients had developed an anemia secondary to infection or chronic disease and, in general, showed a normocytic, normochromic anemia except where mild iron deficiency was also present. This combination of factors as a cause of anemia may be more common than has generally been supposed since, in the female, mild to moderate iron-deficiency may already be present when an infection or inflammatory disease is superimposed.

We considered our results in the iron deficiency series to be most satisfactory although no comparison with the effect of iron therapy alone was made. It should be noted, however, that the dosage of iron used was below the accepted optimal dosage.

Since Stohlman[25] has shown that erythropoietin levels are not significantly increased in animals with mild to moderate iron-deficiency anemia and Kraus[26] has confirmed this fact in humans, the rationale for the combined use of cobalt and iron in iron deficiency appears to be increasingly well established. In the presence of adequate iron, the cobalt-induced increase in circulating erythropoietin would be expected to produce a superior response.

In the group of patients with anemias secondary to other disease etiology, but in whom endocrine dysfunction was not a factor, results were considered to be exceptionally good since all but two showed significant increases in hemoglobin concentration and it is well established that due to failure of utilization, iron is of no corrective value. Tolerance to the medication was especially noteworthy in patients with colitis and gastritis (5018, 4841, 3651).

It was also noteworthy, since this condition is exceedingly resistant to anti-anemia therapy, that four of the group of patients with rheumatoid arthritis (4609, 5229, 1107, 5054) all showed rather striking improvement in peripheral blood values.

In the group of eight patients in whom endocrine dysfunction was associated with the anemia, results were considered unusually good in the four hypothyroid cases since this anemia is known to be exceedingly resistant to treatment.

Summary and Conclusions

Copoietin-ferrous, a new preparation containing an organic cobalt complex and ferrous sulfate, was

used in treating 54 patients with non-macrocytic anemias of varying etiology. Although the dosage of iron was relatively small, our experience has led us to conclude that Copoietin-ferrous is effective in iron-deficiency anemia and that tolerance is significantly improved.

As judged by the response in the "secondary" anemias, the new cobalt compound appears to be fully effective in enhancing the formation of erythropoietin.

Of the 47 patients who were followed to completion of the study, 42 (89.3 percent) showed improvement or complete correction of their anemia after treatment for periods ranging from two to 45 weeks. Only three patients complained of side effects, which were limited to gastrointestinal discomfort in two cases and a mild rash after 119 days of treatment in the third. This rash disappeared promptly upon discontinuance of therapy.

Symptoms of weakness, lassitude, fatigue and irritability appeared to be improved or relieved in the majority of the patients and, generally speaking, patients voluntarily reported an improved sense of well-being as hemoglobin levels increased.

In our opinion, the use of Copoietin-ferrous in the treatment of the common hypochromic and normochromic anemias represents a safe and effective treatment.

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References

1. Berk, L., J. H. Burchenal, and W. B. Castle. *New England J. Med., 240*:754, 1949.
2. Robinson, J. C., G. W. James, and R. M. Kark. *New England J. Med., 240*:749, 1949.
3. Wolff, H. *Klin. Wchnschr., 28*:279, 1950.
4. Weissbecker, L., *Dtsch. Med. Wschr., 75*:116, 1950.
5. Weissbecker, L., *Klin Wchnschr., 29*:80, 1951.
6. Seaman, A. J. *Am. J. Med., 13*:99, 1952.
7. Gardner, F. H. *J. Lab. Clin. Med., 41*:56, 1953.
8. Rohn, R. J., and W. H. Bond. *Jour.-Lancet, 73*: 317, 1953.
9. Coles, B. L., and U. James. *Arch. Dis. Childhood, 29*:85, 1954.
10. Holly, R. G. *Jour.-Lancet, 74*:211, 1954.
11. Quilligan, J. J. *Texas State J. Med., 50*:294, 1954.
12. Hill, J. M., J. LaJous, and F. J. Sebastian. *Texas State J. Med., 51*:686, 1955.
13. Holly, R. G., *Obst. & Gynec., 5*:562, 1955.
14. Ausman, D. C. *Jour.-Lancet, 76*:290, 1956.
15. Hamilton, H. G. *So. Med. J., 49*:1056, 1956.
16. Tevetoglu, F. *J. Pediat., 49*:46, 1956
17. Holly, R. G., *Obst. & Gynec., 9*:299, 1957.
18. Diamond, E. F., F. Gonzales, and A. Pisani. *Illinois Med. J., 113*:12, 1958.
19. Holly, R. G. *Clin. Obst. & Gynec., 1*:15, 1958.
20. Kato, K. *J. Pediat., 11*:385, 1957.
21. Wolff, H. *Med. Montsschr., 5*:239, 1951.
22. Weissbecker, W., and Maurer. *Klin. Wchnschr., 24*:855, 1947.
23. Wolff, H., and S. Barthel. *Med. Wchnschr., 93*:467, 1951.
24. Goldwasser, E., L. O. Jacobson, W. Fried, and L. Plzak. *Sci., 125*:1085, 1957.
25. Stohlman, F. *Symposium on the Erythropoietic Hormone. New York Academy of Sciences,* May, 1958.
26. Kraus, A. M., Personal communication.

Drs. Vance, Black, Pioneer West Texas Physicians, Die

Two outstanding pioneer physicians in West Texas have died in recent weeks.

Dr. James Vance, 84, died in El Paso Dec. 12, 1959.

Dr. Vance came to El Paso in 1905 to do surgery for Dr. Francis W. Gallagher. He was a nephew of the distinguished surgeon, Dr. A. Morgan Vance of Louisville, Ky., and had been graduated from the University of Louisville Medical School in 1899.

He practiced at the old City-County Hospital when it was located near Ft. Bliss. Dr. Vance was the second oldest member of the El Paso County Medical Society and a past president of the organization. He was also Past President of the Southwestern Medical Assn. and was a Fellow of the American College of Surgeons.

Dr. Vance was also an outstanding golfer and hunter. He was six times champion of the Southwestern Golf Assn., and an honorary member of the El Paso Country Club. He was a 32nd degree Scottish Rite Mason.

Dr. W. D. Black, 84, died Jan. 3, 1960, in Pecos.

His long-time friend and neighbor, Dr. Jim Camp of Pecos, recalled the public spirited efforts of Dr. Black, who came to Barstow, Texas, in 1905. The veteran physician was a former mayor of Barstow, where he lived until 1957, and held offices in the City Council, Chamber of Commerce and other organizations. He was a graduate of Baylor Medical School.

A founder of the Ward County Medical Society, he was secretary for 15 years during a time when doctors in that area were few and it was the duty of the secretary to keep the county society organized.

Dr. Black was County Medical Officer for Ward County for 22 years and, after the county seat was moved to Monahans, he served as health officer of Barstow for 40 years. He was also County Health Officer of Loving County for seven years.

Disseminated Coccidioidomycosis Apparently Arrested with Amphotericin B

By Jack A. Bernard, M.D., F.A.C.P., and William M. Tubbs, M.D., *El Paso*

An authority on coccidioidomycosis has pointed out that "the course of acute fulminating disseminated coccidioidomycosis has never been altered by any form of therapy, past or present." Various drugs have been used both clinically and experimentally in the treatment of the disease but evaluation of the drugs has been exceedingly difficult. Ethyl vanillate, stilbamidine and its derivatives have been reported to be of some benefit but the results are not conclusive.

The following is a case report of the use of amphotericin B* in a colored patient with proved disseminated coccidioidomycosis of four months duration with apparent arrest after prolonged intravenous therapy along with aspiration of subcutaneous abscesses with the subsequent instillation of amphotericin B directly into the cavities.

Case Report

A 27-year-old colored male was first seen June 15, 1956, with the history of injurying his right shoulder about three days before. He was thought to have a traumatic bursitis. X-rays revealed no abnormalities. He was given symptomatic therapy but he did not improve and ten days later an orthopedic consultant agreed with the diagnosis of a traumatic bursitis and advised continuation of symptomatic therapy of local physiotheraphy and analgesics.

Three weeks later (July 5, 1956) the patient returned with a swollen ankle. H was given oral steroids for this and improved. Three weeks later (July 30, 1956), he developed an abscess on his chest and an abscess on his right shoulder. He was running a low grade fever of 100 degrees and had lost thirty pounds in weight. The abscess on his shoulder was aspirated and a culture of the pus showed pseudomonas and staph albus. The patient was put on penicillin and streptomycin daily by injection for two weeks. He did not respond and was then put on Albamycin orally. He was becoming progressively worse and continued to lose weight. Daily fever of 100 degrees persisted and new abscesses developed. So on August 22, 1956, he was admitted to Providence Memorial Hospital for further study. An aspiration of the abscess at this time showed coccidioides on direct smear and the diagnosis of disseminated coccidioidomycosis was established (four months after the onset of his first symptom).

Past history revealed that the patient was born in San Antonio, November 10, 1928 and lived there until 1942 at which time he went into the Air Force for two years and was stationed in San Antonio and Alaska. He finally returned to El Paso about two years before he became ill.

Physical examination upon admission to the hospital revealed a malnourished colored male who appeared chronically ill. Temperature was 100 degrees. He had multiple abscesses of the skin: a large soft fluctuant one in the mid-sternal area, which measured 2.5 centimeters in diameter; a draining abscess of the left wrist; a soft fluctuant abscess on each side of his chest anteriorly just below each nipple each measuring 2.5 centimeters in diameter.

In the right axilla there was a two centimeter gland but there were no other palpable glands. His chest was clear. Abnormal neurological signs were absent and he had no meningeal signs. The remainder of his physical examination was entirely normal except for some tenderness over the right ilium.

Laboratory findings revealed: the red blood count 3.84 million; hemoglobin 12 grams (71 percent); white count 5,900 with 58 percent polymorphonuclears; sedimentation rate was 52 mm/hr. The urine showed a trace of albumin and 3-6 pus cells per high power field on centrifuged specimen. Smear from the material taken from the abscess noted above showed Coccidioides immitis. Serological tests for coccidioidal infection showed a positive complement fixation of 1:256, again confirming the diagnosis of progressive coccidioidal dissemination and indicating a grave prognosis.

X-rays showed multiple destructive areas: (See photographs) there were multiple areas of destruc-

*The trade name of amphotericin B is Fungizone, a product of E. R. Squibb and Company of New Brunswick, New Jersey. Fungizone used in this case was furnished without charge by E. R. Squibb and Co.



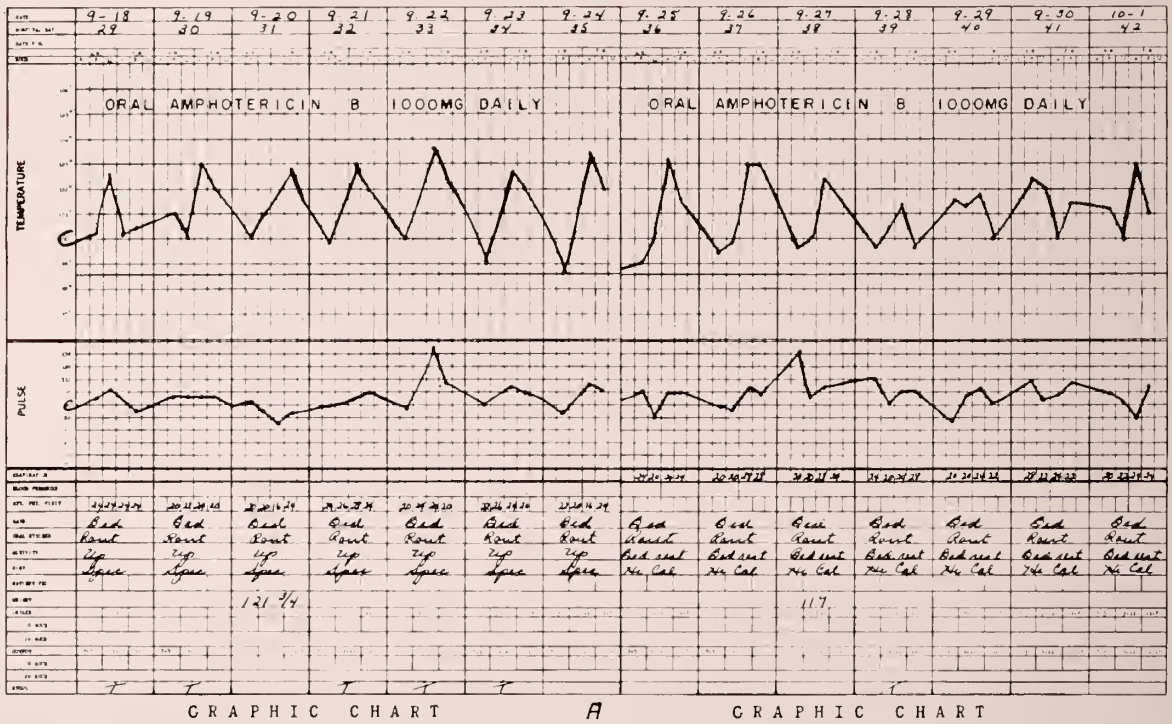
A B C

Figure 1

X-rays showing destructive areas in the ribs (A); in the crest of the right ilium (B), and the anterior lip of the right tibia (C).

tion of the cortex of the anterior end of the sixth rib on the right and some lesser involvement on other ribs; there was an area of destruction in the anterior lip of the right tibia and a small area of destruction in the right ilium; lower thoracic and lumbar spine x-rays were negative.

Through the co-operation of Dr. Gavin Hildick-Smith, at that time Associate Medical Director of The Squibb Institute for the Medical Research of New Brunswick, New Jersey, patient was started on oral amphotericin B 1000 mgm. daily (four 50 mg. tablets five times daily) on September 18, 1956 and these were continued until October 9, 1956, with no noticeable improvement. (See Graph A) The patient continued to become progressively worse and to go downhill. He was losing weight and spiked a daily fever up to 102 degrees. The disease actually appeared to be more progressive in spite of the oral amphotericin: his fever was becoming higher each day, as high as 103 degrees and 103.6 degrees, and the lesions persisted with the abscess on the shoulder and wrist continuing to



Oral amphotericin B 1000 mg. daily produced no improvement in the patient and patient continued on his downhill course. Note loss of 4¾ pounds in one week as shown.



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*References: Maxwell, M. H., et al: Peritoneal Dialysis:
1. Techniques and Applications,
J.A.M.A. 170:917 (June 20) 1959.

Doolan, P. D., et al: An Evaluation of
Intermittent Peritoneal Lavage,
Am. J. Med., 26:831 (June) 1959.



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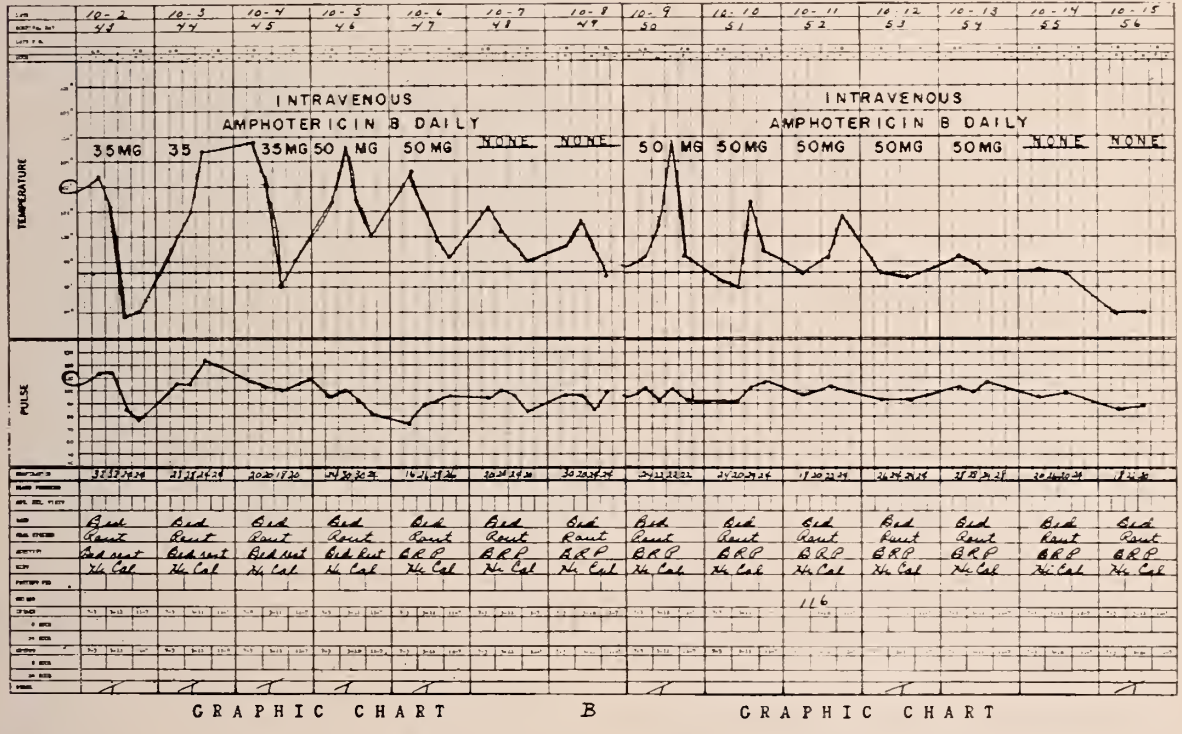
drain. The patient was obviously rapidly succumbing to his disease.

On October 2, 1956, he was started on intravenous amphotericin B therapy. He was given 100 mgm. in 500 cc of 5 percent glucose in water very slowly, but could only take about 150 cc (35mgm.) when he had a chill and his temperature went from 100.6 degrees to 104.6 degrees. He was given symptomatic therapy (aspirin) for this and the next day the same intravenous was repeated, again followed by chills and fever after 150 cc (35 mgm.). Therefore, he was given thereafter 50 mgm. in 250 cc of 5 percent glucose slowly, intravenously, daily five days a week until October 16 (See Graph B) when the injections were decreased to every other day. He was given aspirin for his fever and discomfort and Dramamine orally for nausea. It was felt that it was better to give the intravenous treatments after the patient's evening meal so that his reaction would then occur at night after he had had the entire day to eat his meals.

Liver function studies and urinalyses showed no changes during the amphotericin therapy and BUN was normal after completion of therapy. The only possible side effects were some itching which may or may not have been due to the drug and a slight anemia which developed while patient was under treatment, but patient was anemic before the medication was started.

It was noted that one of the larger abscesses was becoming more fluctuant and it was felt that it would rupture spontaneously so it was decided to aspirate the pus and instill some amphotericin B into the cavity. This was done, using the same concentration and dilution as the intravenous preparation: 50 mgm. in 250 cc of 5 percent glucose, using equivalent amount of this solution as the amount of pus removed. A few days later the abscess was again aspirated and subsequently was aspirated and filled again with the diluted amphotericin. This was repeated every few days until the abscesses had disappeared.

After patient left the hospital, he took the intravenous amphotericin B 50 mgm. in 200 cc of 5 percent glucose on an out-patient basis twice weekly. This was carried out by Dr. U. B. Ogden of Pleasanton, Texas, and patient would go to the office for his treatment following which he would return to his home to have a reaction of severe



Note that the fever and pulse began to subside after 5 days of amphotericin B intravenously, a total of 210 mg. and then he became afebrile after the eighth intravenous injection, a total of 410 mg. of amphotericin B.

headaches, nausea, chills and fever. He would have to go to bed for the remainder of the day, but he would feel well the next morning. He continued to receive 50 mgm. intravenously twice weekly until July 1, 1958. On the days that he didn't receive his intravenous medication he was able to play baseball and felt fine, whereas, on the day he took his treatment he would have to go home to bed. He developed no new lesions. He regained his weight to 140 pounds from the 106 pounds which he weighed when he was ill (his usual weight before his illness was 160 pounds).

On June 27, 1958, patient returned for reevaluation. He had received a total of 5.5 grams of amphotericin B over a 21 month period. He looked well, weight was 135 pounds, blood pressure was 115/90. He showed a large scar over the upper sub-sternal area, a tiny scar over the right shoulder and the left lower chest posteriorly and one on the left wrist. He had some small cervical, small left axillary and small inguinal glands. Remainder of his physical examination was otherwise unchanged.

Laboratory findings were as follows: red blood count 4.58 million; hemoglobin 14.65 grams; white count 7,600 with 60 percent polymorphonuclears; sedimenation rate was 15 mm./hr.; icterus index was 7.2; cephalin flocculation 1+ in 24 hours; BUN was 14.5 mg. percent. Urinalysis was negative with no albumin and no abnormalities in the microscopic specimen.

Radiological studies of the chest, pelvis, ribs and right ankle showed no new areas of involvement and a number of the old previously described areas had healed by sclerosis.

A most important finding was his complement fixation test which was positive 1:64, a reduction of two serial dilutions since his treatment was started in September 1956, which, of course, checked with his clinical improvement.

It was decided to stop his treatment (he had received a total of 5.5 grams of amphotericin B over a 21 month period) and patient returned home and did well, went to school and stated that he felt well except that he got tired easily and that he seemed to run a little fever at times, although he admitted he did not take his temperature.

On November 25, 1959, seven months after cessation of treatment, he returned for an examination. He looked well, weight was 139 pounds, temperature 98.6 degrees. A scar over the sternum and on the upper right shoulder persisted. Physical examination was entirely unchanged. Laboratory findings were again normal. X-rays revealed progressive healing of the bone lesions with no new bone involvement. Complement fixation was positive 1:16, a reduction in titer of another serial dilution during the past eight months during which he received no treatment. (Dr. Charles E. Smith noted that the titer was below generally seen in disseminating disease.)

Finally on January 22, 1960, 19 months after patient's last treatment, he returned for his annual check-up, stating that he had had occasional fever for the last few months at night up to 100 degrees and that he had to quit playing baseball because he would get too tired.

Physical examination revealed no change. His temperature was repeatedly normal. He still had some glands and the scarring as described previously. Laboratory findings were unchanged. Complement fixation test was positive 1:16 which Doctor Smith interpreted as being a stable and reasonable low titer of complement fixation, compatible with his lesion continuing to remain healed and his essentially normal sedimentation rate. He felt that the serology indicated no coccidiodial "activity".

Discussion

This is the seventh reported apparent arrest of a case of disseminated coccidioidomycosis with amphotericin B and one of the first cases in which the drug was used and one of the first cases in which subcutaneous abscesses were aspirated and instilled with amphotericin B, thereby preventing the terrible scarring which commonly results in such cases.

Oral therapy in our patient in the dosage used (1000 mg. daily for two weeks) was ineffective (See Graph A) and actually the patient was progressing downhill rapidly on the oral therapy.

Amphotericin B produced no serious toxic effects in this case other than the side effects of headaches, chills, fever, nausea and vomiting which followed immediately after the intravenous administration of the drug and which were alleviated somewhat by reducing the dosage and by symptomatic therapy with Dramamine and aspirin. Patient was able to tolerate these after effects without too much difficulty and was able to take the medication on an out-patient basis and then

retire to his home to bed and then would be in good condition the next day to carry on normal activity, even to the point of playing baseball.

Further experience will be necessary to establish the dosage and duration of treatment. This patient became afebrile after nine days of intravenous therapy, about 35 to 50 mg. daily, five days per week, approximately 0.4 grams. Thereafter he was given 50 mg. about three times weekly for several months and then 50 mg. twice weekly for a total of 21 months: a total of 5.5 grams of amphotericin B.

To follow the patient one observes his temperature, weight and appetite as well as the laboratory findings of sedimentation rate and serologic studies, the complement fixation titers being most useful in following the course of the illness and particularly as regards prognosis.

Elevation of blood urea may occur if the dosage exceeds 1 to 1.6 mg. per day but this is apparently reversible. Urinalyses were carried out repeatedly in our case but unfortunately blood urea studies were not done during the course of treatment. Repeated blood urea studies at the conclusion of treatment were normal.



Figure 2

Note scarring over the mid-sternal area, under the left breast and left wrist and the small scar just at the top of the right shoulder where the abscesses ruptured spontaneously; there was also an abscess under the right breast which was treated as described in text and which shows no residual scarring and only slight pigmentation.

Conclusions

An apparent arrest of a case of disseminated coccidioidomycosis in a colored male by the use of intravenous amphotericin B with the injection of the material into subcutaneous abscesses is reported and the lesions so treated healed without scarring. (Figure 2) The drug was fairly well tolerated with no serious side effects. Oral amphotericin B appeared to be ineffective. Toxicity of the drug limits its usage, but it is not prohibitive.

Acknowledgement

Serologic tests were kindly performed and interpeted by Dr. Charles E. Smith, University of California, Berkeley, California. His collaboration was most helpful.

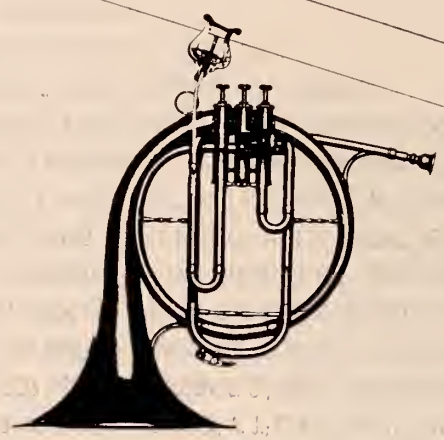
Asknowledgement also to Providence Memorial Hospital and R. E. Thomason General Hospital for their services and co-operation and particularly the radiology department of Providence Memorial Hospital under Drs. Ravel and McVaugh.

References

1. Fiese, Marshall J., M.D., F.A.C.P. Coccidioidomycosis. Charles C. Thomas, Springfield, Illinois, U.S.A., 1958.
2. Smith, Charles E., M.D. Coccidioidomycosis, The Pediatric Clinics of North America, February, 1955. Volume 2, Number 1.
3. Schwarz, J., M.D., and Muth, J. B. S. Coccidioidomycosis: a review. American Journal of the Medical Sciences, 221, 89-107, January, 1951.
4. Smith, Charles E., M.D., Saito, Margaret T., B.S., and Simons, Susan A., M.P.H. Pattern of 39,500 serologic tests in coccidioidomycosis. The Journal of the American Medical Association, February 18, 1956, Vol. 160, pp. 546-552.
5. FitzPatrick, Martin J., M.D., Rubin, Harry, M.D., and Poser, Charles M., M.D. The treatment of cryptococcal meningitis with amphotericin B, a new fungicidal agent. Department of Medicine, University of Kansas School of Medicine, and the Kansas City Field Station, Public Health Service, Department of Health, Education, and Welfare, University of Kansas Medical Center, Kansas City, Kansas, Vol. 49, No. 2, 1958, Aug.
6. Colwell, John A., Captain, USAF. Remission in disseminated coccidioidomycosis produced by amphotericin B. 416th United States Air Force Hospital, Davis-Monthan Air Force Base, Tucson, Arizona.
7. Klapper, Margaret S., M.D., Smith, David T., M.D., and Conant, Norman F., Ph.D. Disseminated coccidioidomycosis apparently cured with amphotericin B. Vol. 167, No. 4, J.A.M.A., May 24, 1958.
8. Coccidioidomycosis. Quart. Prog. Rept. U.S. Veterans Admin. —Armed Forces Study on the Chemotherapy of Tuberc. 12(3): 93-94, 1957.
9. Fiese, M. J.: Treatment of disseminated coccidioidomycosis with amphotericin B, California Med. 86: 119-120, 1957.
10. Horowitz, I., and Berglund, E. M.: Amphotericin B: a new antifungal antibiotic in the treatment of coccidioidomycosis, Transactions of the 16th Conference on the Chemotherapy of Tuberculosis (U. S. Veterans Administration) 345-347, 1957.
11. Utz, J. P., Louria, D. B., Feder, N., Emmons, C. W., and McCullough, N. B.: A report of clinical studies on the use of amphotericin in patients with systemic fungal diseases, in Antibiotics Annual, 1957-1958, New York Medical Encyclopedia, Inc., New York, pp. 65-70.
12. Littman, M. L., Horowitz, P. L., and Swadey, J. G.: Coccidioidomycosis and its treatment with amphotericin B, Am. J. Med. 24: 568-592, 1958.

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Rautensin bibliography: 1. WRIGHT, W. T., JR.; POKORY, C., AND FOSTER, T.: AM. PRACT. & DIGEST. TREAT. 7:1992, 1956. 2. SUCKLE, E.: GERIATRICS 11:509, 1956. 3. FINCH, W. J.: J. OKLAHOMA M.A. 50:259, 1957. 4. TERMAN, L. A.: ILLINOIS M. J. 3:67, 1957. 5. GIFFORD, R. W.: J. ARKANSAS M. SOC. 55:31, 1958. 6. FORD, R. V., AND MOYER, J. H.: POSTGRAD. MED. 23:41, 1958.

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Clinical Pathological Conference

R. E. Thomason General Hospital, El Paso

Case #1405, February 18, 1960

Frederick P. Bornstein, M.D., *Editor*

Presentation of case by Irvin J. Goldfarb, M.D.

History: Dr. Nathan Kleban:

On June 27, 1954 the 7th child, a 7 lb. 11 oz. boy, was born to a 27 year old woman and 31 year old man in this hospital. Pregnancy and vaginal delivery were uneventful. Siblings and parents were healthy.

Infectious diarrhea and inflamed buttocks hospitalized the baby from September 22-28, 1954. Weight increased from 9 lbs. 12½ oz. to 10 lbs. 9 oz.

Three weeks before the third admission from February 26 to April 9, 1956 this Latin-American boy developed a cold. Ten days later swelling around the eyes was noted. Several days before he was brought to the hospital the parents detected abdominal swelling and scanty urine of normal color. Appetite remained good. There was a nose bleed on the day of admission.

The child had had no immunization, contagious diseases, or supplemental vitamins. Family history recorded one allergic reaction of unspecified type by the father.

Acutely Ill

The boy was acutely ill, pale, edematous, had a blood pressure of 160/110. In addition to periorbital edema there were blood crusts on the nasal mucosa and ascites. There was no subsequent elevation of blood pressure in the hospital. Response to prednisone therapy for nephrosis was not dramatic.

Repeated admissions to this and another hospital occurred because of upper respiratory infections, chicken pox, ascites which required abdominal paracentesis on several occasions, thrush and failure to do well at home. Nitrogen retention was slight early in the course of the illness, was somewhat more prominent but usually reversible in 1957 and 1958 but progressed to azotemia and uremia in 1959. The second half of the latter year was spent in the hospital.

Last admission to this hospital was on January 29, 1960. The patient was said to have pains in his extremities and had been unable to eat or speak since the day before admission.

Physical Examination:

T. 100.6; P. 82; R. 32; B. P. 110/90; Wt. 41 or 30½ lbs.

Temperature rose to 105.2 on second day and 103.2 on the third, when weights were 29 lbs. 1 oz. and 27 lbs. 2½ oz. Breathing was labored. There was slight periorbital edema. Pallor, distended neck veins, rales, cardiomegaly, hepatomegaly, ascites and neuromuscular irritability were noted.

Hospital Course:

Labored breathing continued. There were liquid yellow and green stools. Twitching and convulsions preceded death on the third day.

Laboratory Findings:

February, 1956—Age 20 months: Blood pressure 160/110; Urea Nitrogen 27.5; Total cholesterol 730, Total protein 4.2, Albumin 2, Globulin 2.2. Urine, S.G. 1.032, albumin 4+, a few white cells, occasional red cells, innumerable hyaline casts, chest X-ray and electrocardiogram normal.

April, 1956—Urine, albumin 2+, to 4+, some red cells, some white cells, a few hyaline casts.

January, 1957—Abdominal X-ray showed ascites due to nephrosis; white count 26,000, blood sodium 130 mEq/L, potassium 3.8, calcium 7.2 mg. percent, fever up to 102.

April, 1957—Albumin 4+, 14 white cells, 4 to 5 granular casts, white count 34,000.

August, 1957—Blood pressure 104/65.

September, 1957—Albumin 4+, 4 to 6 white cells per high power field, 6 to 8 red cells.

January, 1958—white count 22,000, NPN 57. X-ray showed interstitial pneumonitis.

March, 1958—Hotel Dieu—Blood pressure 90/45, NPN 94, Urine, albumin 3+, 5 to 6 red cells, white count 28,000.

May to June, 1958—Urine, S. G. varied between 1.007 and 1.023, albumin 4+, red cells have disappeared, hyaline casts are present, total protein 4, albumin 2, globulin 2.1, Urea Nitrogen 31.5, Sed. rate 51, Total cholesterol 400, CO_2 capacity normal, chlorides 120 mEq/L. sodium 158 mEq/L, potassium 3.7 mEq/L.

August, 1959—White count 22,000, hemoglobin 7 grams. Urine, albumin 4+, 10 to 15 granular casts, packed with white cells, 3 to 4 red cells, Urea Nitrogen 56, CO_2 capacity 22 mEq/L, chlorides 110 mEq/L, potassium 3.6 mEq/L, sodium 140 mEq/L.

July 17, 1959—Chest X-ray—Healthy chest.

July 29, 1959—X-ray abdomen—Findings suggestive of ascites.

Clinical Discussion: Dr. Irvin J. Goldfarb:

All the pediatricians saw this child and most of us were in fairly good agreement clinically, the child suffered of nephrosis—pure lipoid nephrosis. I will just go ahead and discuss the more common renal diseases of children and then include the more exotic diseases with just a word.

First of all, nephrosis, which is what we feel this patient had, is characterized by general edema, proteinuria, hypercholesteremia, and hypoproteinemia, classically without significant hypertension, although hypertension may occur any time in the course of the disease.

Azotemia usually is not present early in the disease although it may be. This disease commonly begins somewhere between 18 months to five years. The course of the disease is insidious, characterized by remissions and exacerbations. The ultimate outcome of the disease is variable, it may have been modified recently by the introduction of the steroid therapy.

Previously it was felt that approximately one-third of these patients died early, about one third of them went into a chronic phase and eventual death and approximately a third of them recovered. These figures may have to be changed upward in terms of cure, although we have not had a long enough follow-up on the steroids to know whether we are altering their ultimate outcome or not.

Etiology Unknown

The etiology of the disease is unknown. Pathologically the kidneys are enlarged. There is thickening of the cortices, presence of liquid material both grossly and miscroscopically. The cells are granular; within degenerated cells, droplets of lipoid material are present. It was thought originally that the disease was confined to the tubule and that the glomerulus was not affected.

However, with present staining, very definitely you can see intercapillary basement membrane changes, fibrinoid degeneration, and for this reason current thought is that it is probably a glomerular disease also, with the changes in the tubule being secondary to the glomerular disease.

Clinically, the disease has an insidious onset, with the child appearing to be well. There occurs gradual onset of anorexia, development of malnutrition, gastro-intestinal disturbances, vomiting or diarrhea, followed by swelling which is usually noticed by the parents. The patients are very susceptible to infection. Pneumococcal disease particularly has always been a hazard, pneumococcal peritonitis, pneumococcal pneumonia, meningitis, and I should mention that superimposed pyelonephritis is not uncommon in these kids. Of clinical signs, of course, edema and oliguria are obvious. I should mention that retinopathy and hypertension is usually absent early in the disease.

Early urinary findings are casts, albumin with minimal or no hematuria. Again, as the disease progresses, a lot of these things can change. Renal function tests, strangely enough, early in the disease are pretty normal, including the B.S.P., as are the more refined tests, the urea clearance, etc.

Studies of the blood show us a reduction in total protein, particularly the albumin; and with long standing disease it may reach the point where you cannot measure the albumin present by chemical means.

Anemia is usually not present early in the disease but universally follows after the patient has had the disease for awhile. Cholesterol and all

other lipids are universally elevated. Cholesterol levels of 600 to 1000 or higher are not unusual. Serium calcium is generally depressed. It isn't shown here on this limited protocol but the serum calcium was 1.8 mEq/L on two or three occasions. Serum sodium, CO_2, may be reduced. If we measure them the amino acid level is also low.

Treatment is not specific, but mostly supportive. Activity—they pretty well limit themselves, so there is no point in giving hard and fast rules on how much activity they should have.

Management

An adequate diet should be given. Salt restriction is probably not necessary, although I certainly would avoid high salt foods. Infections have to be treated early and vigorously. Our case probably began with a very mild upper respiratory infection.

Management of the acute edema—some salt restriction, an adequate protein supply. However, if their potassium is high some think we ought to limit the protein intake. Thoracentesis or paracentesis are indicated if we have interference with respiration.

Treatment

Finally, ACTH or cortisone treatment has changed the picture somewhat. The exact mechanism of action nobody knows. Some people say that it seals up the damage in the capillaries and allows the retention of protein. We know that when the patients respond that their serum protein level will rise and their serum cholesterol will fall. They will stop losing protein in their urine. Their general nutritional status, their anemia, is all corrected with good results.

If you have a failure at one time it may work another time. Steroids certainly are our prime treatment in nephrosis. The follow-up treatment is not one hundred percent agreed on. When diuresis is achieved, most people believe that steroids should be continued, probably in an interrupted form. Three days a week of steroids, to be continued indefinitely, or until the sedimentation rate and the urine has become normal and remains normal.

Recently a new diuretic has been introduced, I have had very limited experience with it, one patient, Aldactone, which is supposed to be an aldosterone inhibitor. It is said to be effective in nephrosis. We do know the aldosterone level is very high in this disease, as it is with refractory heart failure, cirrhosis and a few other diseases which have been refractory to the previous diuretics.

However, even with this diuretic, it is recommended that the patient be started on the steroids first, and in the event of failure, or if you only have limited success, use this strictly to reduce the edema fluid.

Acute Form Rare

In general that covers nephrosis, which again I think this child has. I wanted to mention nephritis, acute glomerulonephritis, or acute hemorrhagic nephritis. The acute form of the disease is rare under age three. This child's first admission was age two, approximately two years of age. We know the etiology of this disease. It is thought to be a hypersensitivity state, usually following an infection with the beta hemolytic strep, and, more specifically, group 12, beta hemolytic strep.

Others assume that it can follow a pneumococcal or staphlycoccal infection, although I don't know what basis they have for this. We do know that even if we don't find the causative lesion we usually have some supportive evidence for a previous strep infection. The antistreptolycin O titer or other similar tests are usually elevated at the time the patient is admitted with acute nephritis.

In many cases at the time of admission the site of the infection is obvious. In an upper respiratory infection you grow alpha beta strep. However, in many, many cases it may follow what may have been a very mild impetigo in which the skin lesions have completely healed; or in which there are only one or two very small lesions, not enough to have made the child ill.

Pathologically, the kidneys are very slightly enlarged, pale, dotted with punctate hemorrhages. The endothelial cells of the glomerular capillaries are swollen. This is considered primarily a capillary disease. Albuminous fluid is found, red cells, white cells, may be found in the space of Woman.

There may be some fibrinous adhesions between the capillary tuft and the capsular wall. The tubular cells are swollen, granular, with hyaline and fatty deposits. However, there is minimal in-

flammatory reaction to the disease, not truly an inflammatory disease. The sub-acute disease varies. Usually there is a large, pale kidney, there is a disappearance of the nephrons, compensatory hypertrophy of other nephrons, there are more capsular adhesions, and epithelial crescents are supposed to be present.

Chronic nephritis is characterized by a small kidney, the capsule is adherent, the surface is finely granular. There is more hyalinization of glomeruli, or these may completely disappear. Many tubules are atrophic, or gone. Extensive scar tissue is found, focal and diffuse infiltrate of lymphocytes is also found.

Now I should mention that nephrosis, or the nephrotic syndrome in, I would say, rare instances, may follow a classic acute nephritis; go on to sub-acute or chronic disease, and end up with a picture which is in no way different from pure nephrosis.

Clinical Story

I don't believe I should go into the entire clinical story of acute nephritis; I will mention the fact that they do put out large amounts of blood, on admission the edema is not too marked but they have some puffiness of eyes, they are putting out albumin, but not in the tremendous amounts the nephrotic patient does, they may have hypertension of severe degree, they may develop cerebral symptoms, or heart failure.

The acute disease is a serious illness and has to be treated vigorously, particularly for the complications. But if you get them through the acute phase of active nephritis, approximately 95 percent will recover, this varies between 95 percent and 98 percent. About 2 percent may go on to chronic disease, and about 2 percent will die in the acute phase. So of the two diseases, acute nephritis carries a much better prognosis than nephrosis, and as a rule again I will say it is not too hard to differentiate these two diseases. There is such a thing as mixed disease, a small number of patients do go on from what you think is an acute nephritis into a nephrotic stage.

The chronic nephritis of course is characterized by periods of general well-being, the kidney changes will go right on. Many of these children will do all right until they reach adolescence at which time they will go on to complete renal shut-down and death in uremia. This is thought to be due to the stresses of the changes of puberty. Those are the primary diagnoses that we have to think about.

Other Diseases

Now for completeness I do want to cover a number of other diseases. Pyelonephritis should very definitely be mentioned, certainly low grade or sub-acute pyelonephritis can be present with a minimum of symptoms which would point to the GU tract.

The patients may not be too ill, there may not be fever, there may not be pain, but repeated infections with repeated insults to the kidney can eventually lead to renal failure, end up with a pretty badly scarred kidney. These children with nephrosis can very definitely have a superimposed pyelonephritis on the original kidney disease which will further contribute to the destruction of renal parenchyma.

Congenital polycystic kidney I will mention. There is no reason why a person with a congenital anomaly of the kidney can't develop any other kidney disease. If this child has it, I think it will be a pathologic finding, I don't believe it is the main thing. I think it is important that we mention that many of the drugs that we are using can cause renal toxicity.

In particular I want to mention Tridione which is used in petit mal and can cause a picture which cannot be distinguished from nephrosis. It has all the classic pictures of a nephrosis but if you withdraw the drug he will get well. If the patient is challenged again with the drug he will again develop nephrosis. Tridione nephrosis does not happen frequently but it can happen often enough and not be recognized.

Other drugs, sulfonamides, have been implicated, and of course we are all acquainted with changes that come with shock, crush syndrome, and with transfusion reactions. Our old friend syphilis is said to be able to cause diseases similar to either nephrosis or nephritis. With amyloid disease, thrombosis of the renal vein, I'm getting in left field now. Finally, nephrosclerosis which is extremely rare in children, can occur with the adult picture of a malignant hypertension.

It has been recorded as young as one or two months, I've seen one in a six months old baby.

This infant developed severe unrelenting hypertension and died within about three or four weeks, but the kidneys were in no way different from the kidney of an adult who dies with malignant hypertension.

Finally, I will just say that I still feel that we are dealing with nephrosis, we may have a superimposed pyelonephritis, and terminally very likely a pericardial pleural effusion, ascites of course we know is present, and cardiomegaly.

Dr. James L. McNeil:

I think I have nothing to add, except that it points out the frustration that you have in trying to treat one of these children, everybody can look at it and everybody can work on it and everybody can treat it and this is what happens to most of them.

Dr. B. K. Byrne:

I had a little advantage in that Dr. Goldfarb brought his stack of charts up to the office last week. The first admission, as I could put it together, looked like nephrosis to all concerned, but I think we are going to find some mixed disease or some glomerular disease in this case because of the calcium. Generally a nephrosis loses calcium, but they only lose the calcium that they are losing bound to their albumin, and they don't get tetany. This calcium got down to 1.8 and the kid did not have tetany.

Clinical Diagnosis: Lipoid Nephrosis.

Dr. Goldfarb's Diagnosis: Nephrosis with possible superimposed pyelonephritis.

Pathological Diagnosis: 1. Chronic glomerulonephritis; 2. Bronchopneumonia; 3. Acute, fibrinous pericarditis.

Pathological Discussion: Dr. Bornstein:

The child was admitted dying with a pneumonia. As all these chronic kidney cases with a nephrotic syndrome, they have pneumonias over and over. This child had a pneumonia, and a uremic pericarditis, and naturally the kidney disease.

The kidneys were extraordinarily small, each of the kidneys weighed less than 50 grams. The surface was fairly uniformly granular, the appearance of both kidneys was the same, so unilateral lesions like a chronic pyelonephritis can be ruled out. The granularity is small and very fine, so you also can exclude a nephrosclerosis. The cut surface showed essentially an atrophic cortex.

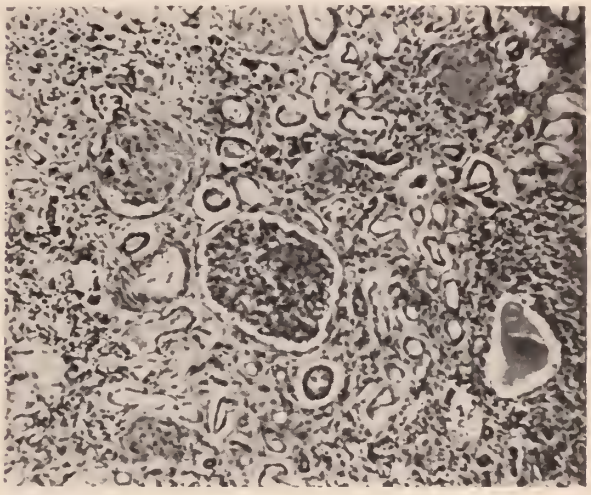


Fig. 1.: Renal cortex, low power, diffuse chronic glomerulonephritis.

Microscopically (Fig. 1) one could see total disorganization of the entire renal pattern. The stroma was infiltrated with inflammatory cells, most of the glomeruli were hyalinized, some had crescents and here and there was a large, swollen glomerulus (Fig. 2). Even the larger glomeruli were involved in active inflammatory disease and were larger than they should be. The tubules were small, atrophic and fat stains were completely negative.

Now we have here a classical picture of a chronic glomerulonephritis. It has been my feeling

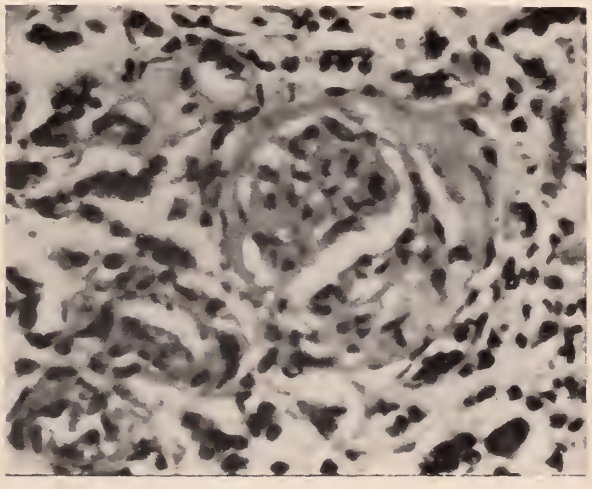


Fig. 2.: Kidney, high power, glomerulus with inflammatory crescent.

in observing chronic glomerulonephritis that this is a disease in which there are always new attacks to destroy more glomeruli. The patient died while an active process went on destroying more glomeruli. We see here beside the destructive of the chronic glomerulonephritis, the superimposed active part.

Now the question then arises, what is the relation of this kidney to the nephrotic stage? When Volhard and Fahr in 1914 started to produce their basic classic, "Description of Various Phases of Renal Disease," they separated the nephrosis from the nephritis. Now that concept has been attacked a great amount, specially by Bell in Minneapolis, and by Allen in his book on the kidney. They state that nephrosis is only a part of nephritis.

My personal feeling and experience is that there do exist cases of pure lipoid nephrosis which clinically are indistinguishable from the nephrotic part of nephritis. I have done one autopsy where I am quite convinced the glomeruli were entirely normal, where there were tremendous amounts of lipoid material in the tubules, where there was tremendous edema, and the patient died of a pneumonia.

If one considers that the pathologist is charged to correlate clinical findings with anatomical lesions, it is very embarrassing to admit that a lesion like a nephrosis can exist independently and obviously has existed here at some time as a part of a nephritic process. I think that this patient started out as a glomerulonephritis, specially because there were constantly red blood cells in the urine and because he was definitely hypertensive at the age of 20 months. There was a nephrotic stage, obvious from the clinical findings. That at death there was none of it left I have adequately demonstrated with the pictures I have shown you.

Dr. Goldfarb:

Fred mentioned the fact that you can't correlate the pathological findings with the clinical story. However, hypertension was only recorded on one admission, it was transitory, the presence of a few red cells is not unusual, with nephrosis. Also, this child had been on steroids for some time and we do know that it has some effect in lowering the total blood fat and I don't know whether it will affect the presence of the lipoid material in the kidneys or not. I just don't know.

Clinically of course you can't tell a chronic glomerulonephritis from a so-called pure lipoid nephrosis, but I think the big weight of evidence is with the onset, with the elevated serum cholesterol, with the massive albuminuria, with the subsequent course, that this fits so-called lipoid nephrosis much more down the line than chronic nephritis. I don't think at any time in the clinical course was the diagnosis of acute glomerulonephritis even considered.

Dr. McNeil:

Pathological findings are always interesting. I think everybody has always, in this group at least, known there are two schools of thought, there is the school that thinks there are separate diseases and there is the school that thinks there are variations of the same disease. There is always the in-between case, which may look like a typical nephritis, and go into the nephrotic stage later on. There have been all kinds of articles written as to whether they are the same or separate diseases.

Regardless of what the pathologist reports, clinically they appear to be, at least in the majority of cases, separate diseases, and certainly glomerulonephritis was considered in this child when he came in. Clinically, there was never any question in anybody's mind of the many who saw him, but what this was a pure and simple case of nephrosis, and all we have to do here is admit the pathologist has some interesting findings. Clinically, it was still nephrosis.

Dr. Bornstein:

This argument really can't be answered except if you really want to raise a question, what do we mean by disease entity?. I am firmly convinced that there is a pure lipoid nephrosis. I am also convinced that chronic glomerulonephritis, or a chronic nephritis, has a nephrotic phase. So there are two different structural disturbances which at one point or another give the same sort of disturbed pathological physiology.

After all, clinical symptoms are expressions of a disturbed physiological state. But I think you should keep in mind, and not simply dismiss the fact, that whatever happened to this child, what this child died with, is a small, contracted kidney that has all the earmarks of a chronic glomerulonephritis.



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1. Cook, J.E., Briggs, G.W., and Hindley, F.W.: Chronic Amebiasis and the Need for a Diagnostic Profile, Am. Pract. and Dig. of Treat. *6*:1821 (Dec., 1955).

2. Rinehart, R.E., and Marcus, H.: Incidence of Amebiasis in Healthy Individuals, Clinic Patients and Those with Rheumatoid Arthritis, Northwest Med., *54*:708 (July, 1955).

3. Webster, B.H.: Amebiasis, a Disease of Multiple Manifestations, Am. Pract. and Dig. of Treat. *9*:897 (June, 1958).

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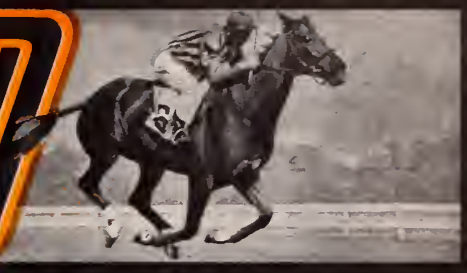
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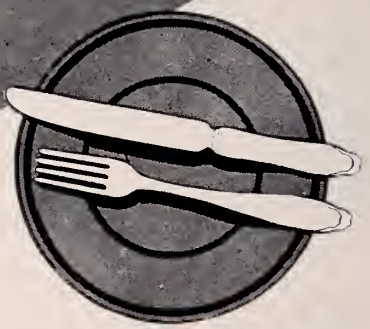
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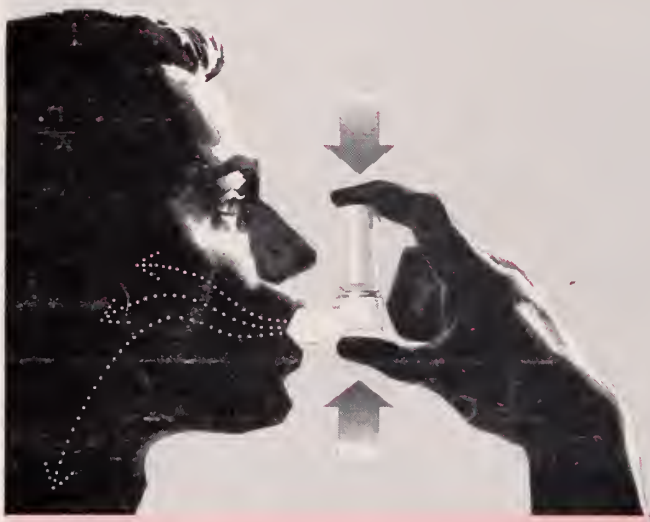
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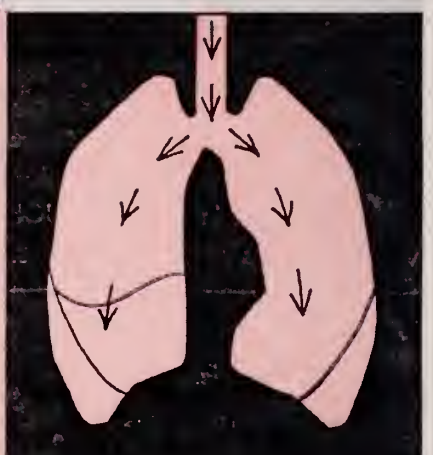
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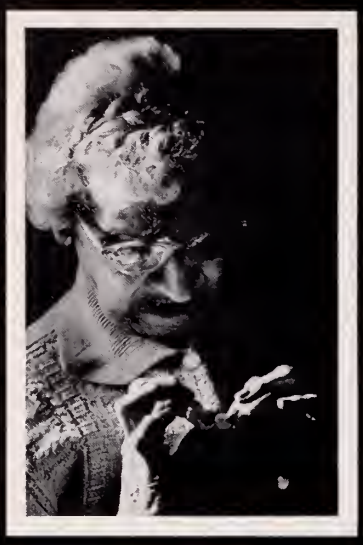
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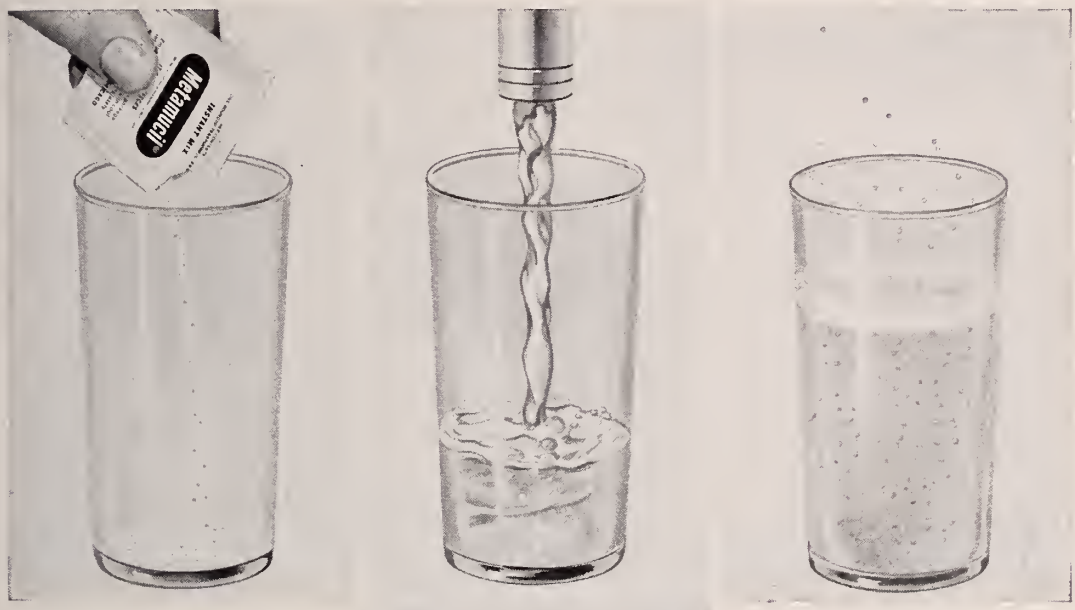
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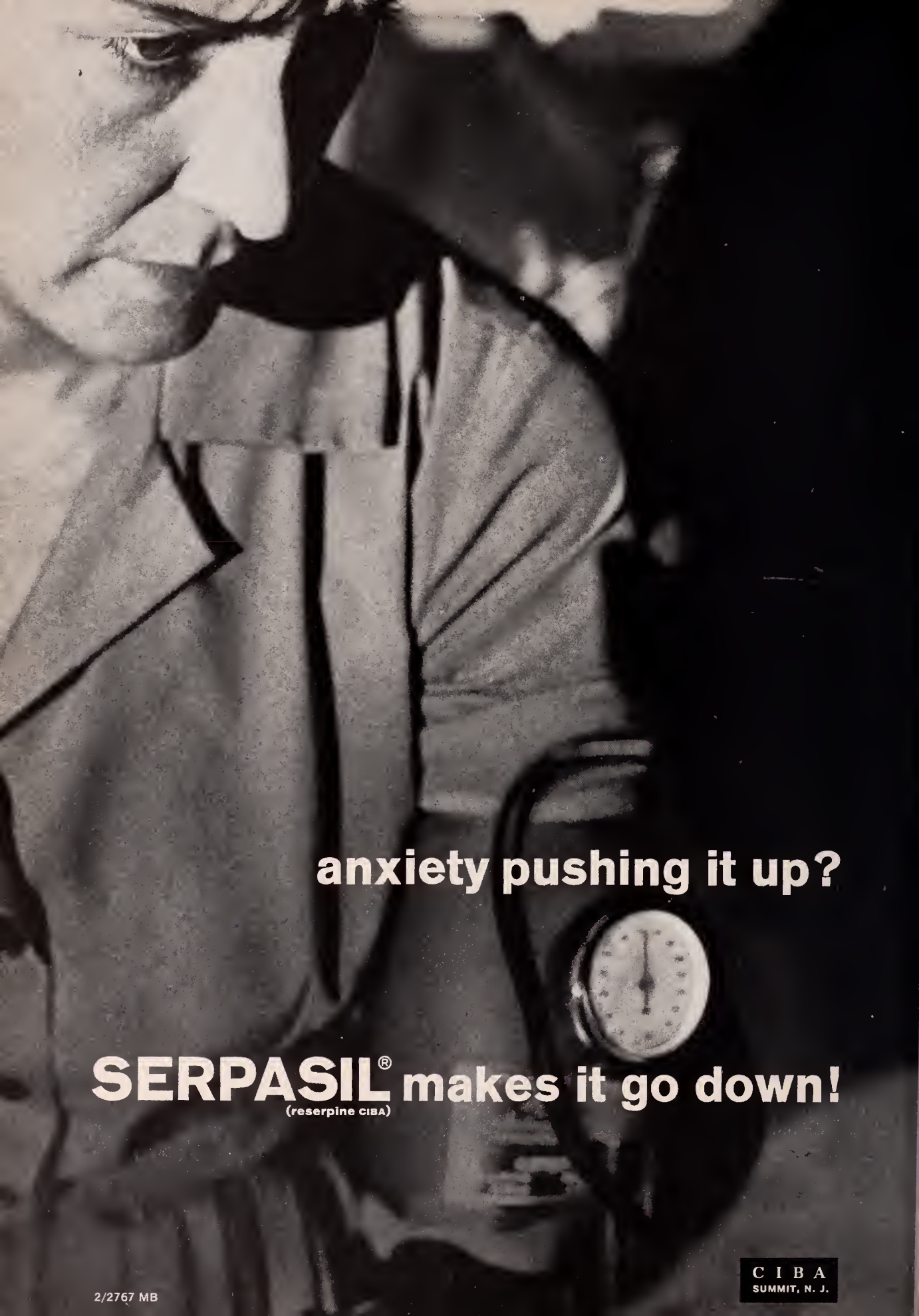
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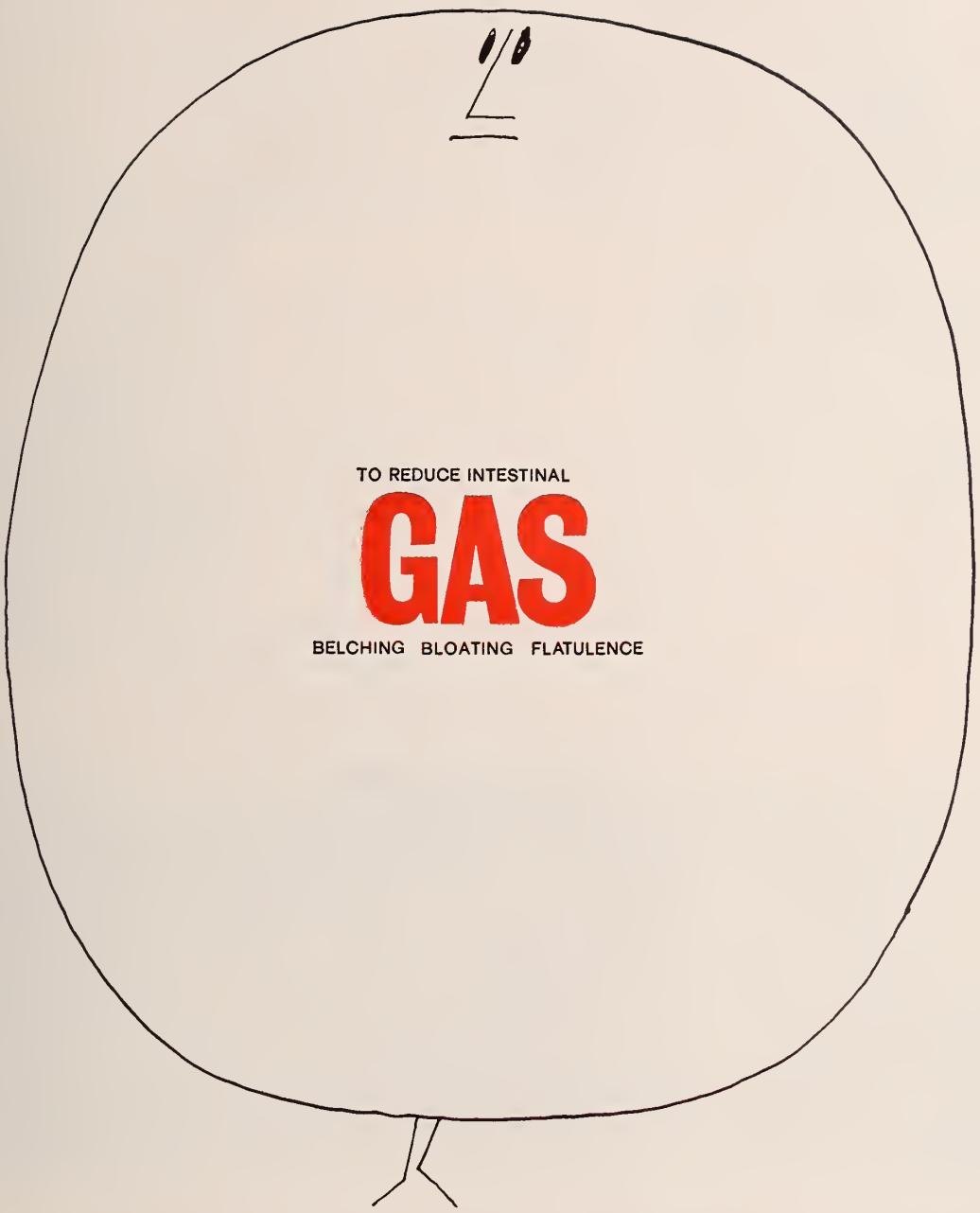
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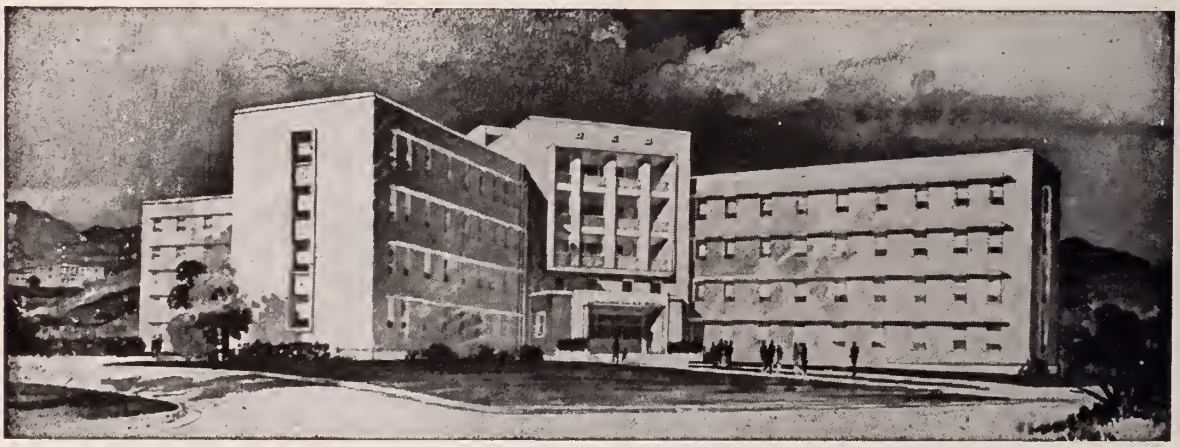
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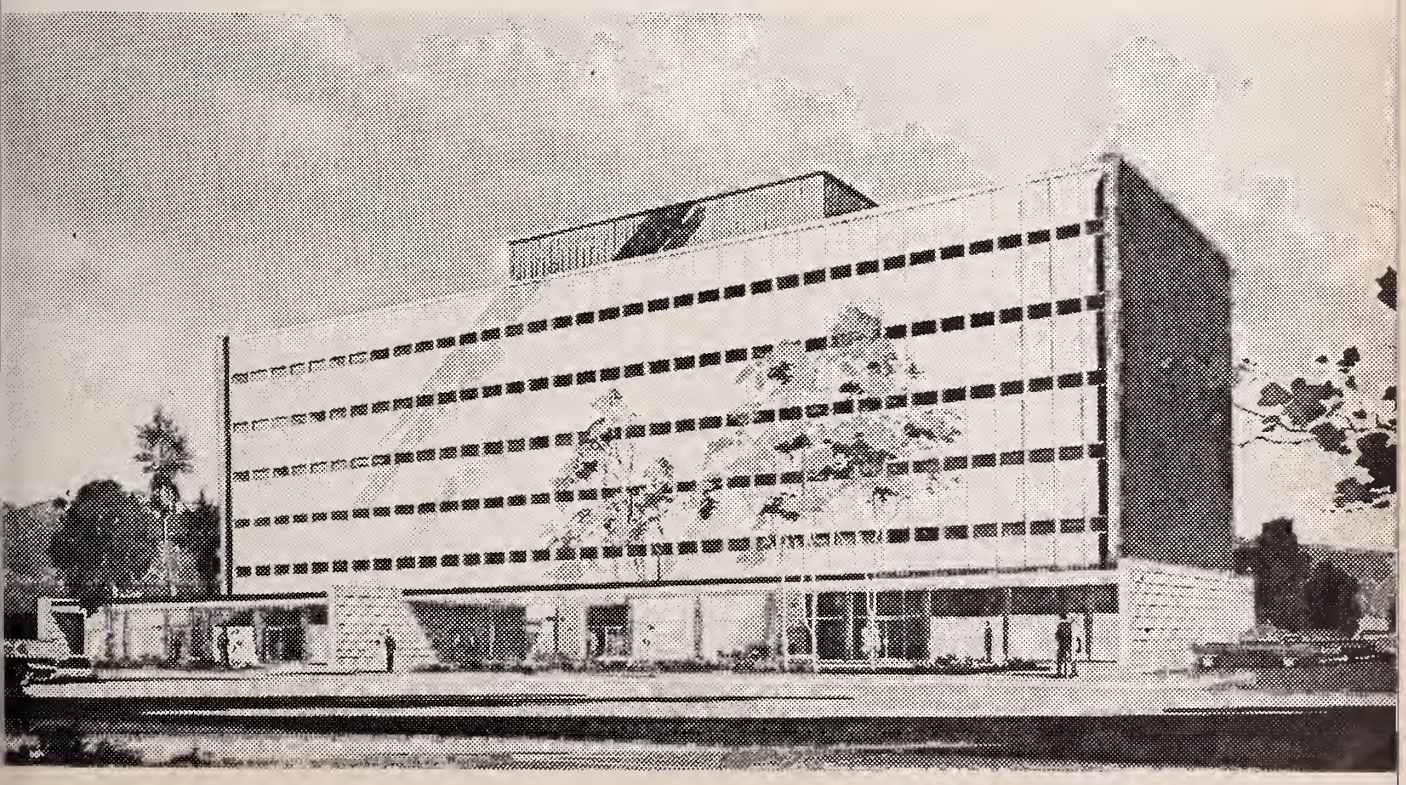
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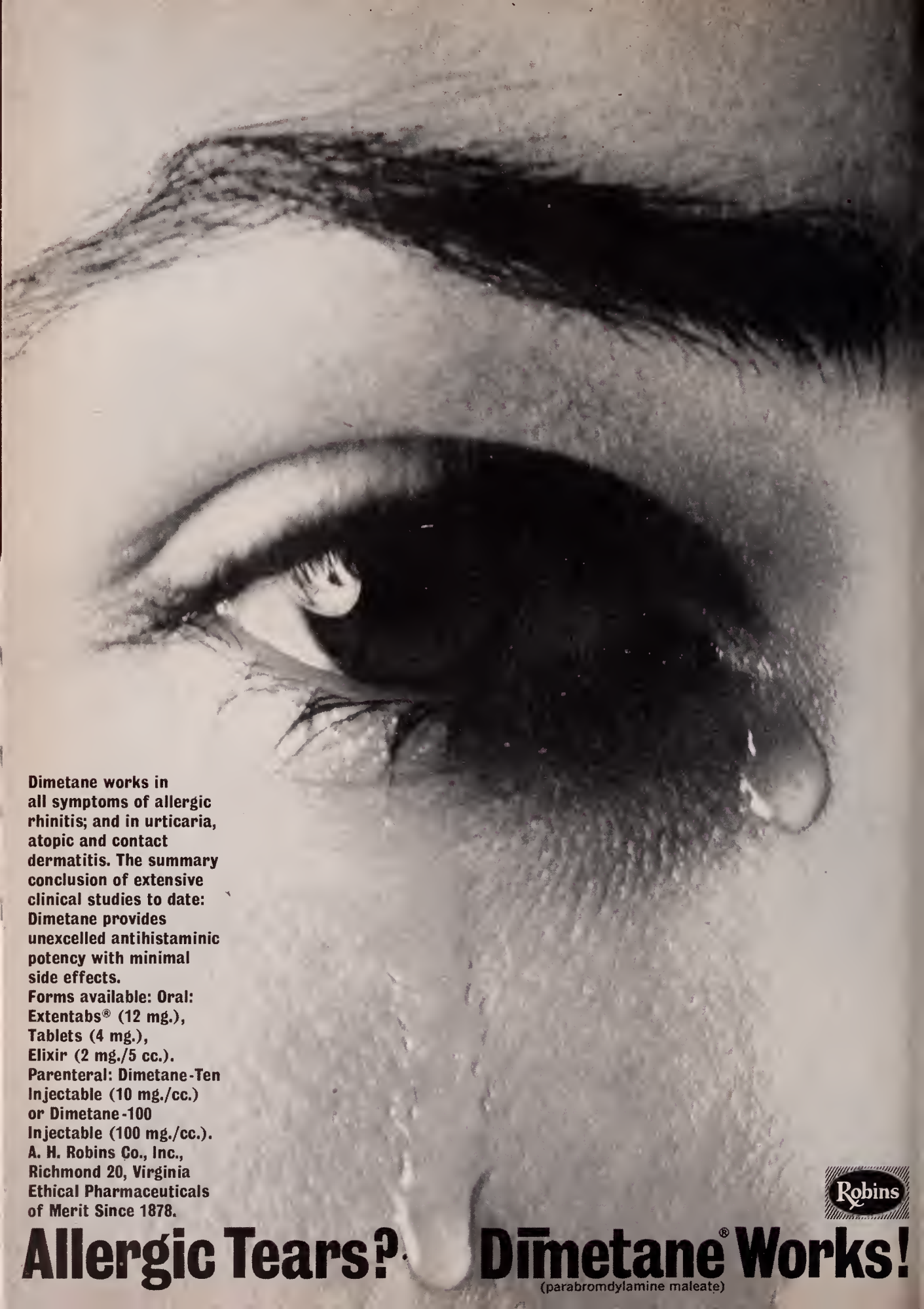
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*Pareira, M. D.; Conrad, E. J.; Hicks, W., and Elman, R.: J.A.M.A. *156*:810-816 (Oct. 30) 1954.

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1. Smylie, H. G.; Webster, C. U., and Bruce, M. L.: *Brit. M. J.* 2:606, Oct. 3, 1959. 2. Hodges, F. T.: *GP* 14:86, Nov., 1956.

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2. Rinehart, R.E., and Marcus, H.: Incidence of Amebiasis in Healthy Individuals, Clinic Patients and Those with Rheumatoid Arthritis, Northwest Med., *54*:708 (July, 1955).

3. Webster, B.H.: Amebiasis, a Disease of Multiple Manifestations, Am. Pract. and Dig. of Treat. *9*:897 (June, 1958).

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Coming Meetings

University of Texas Postgraduate School of Medicine, Postgraduate Course, Turner Home, 1301 Montana Avenue, El Paso, May 8, 1960.

New Mexico Medical Society, Annual Meeting, Western Skies Hotel, Albuquerque, May 8-14, 1960.

Postgraduate Course, Dermatology for General Practitioners, University of Colorado Medical Center, Denver, July 14-16, 1960.

Postgraduate Medical Assembly of South Texas, Shamrock Hilton, Houston, July 18-20, 1960.

New Mexico Chapter, The American Academy of General Practice, Summer Clinic, Ruidoso, N.M., July 18-21, 1960.

Postgraduate Course in Pediatrics, University of Colorado School of Medicine, The Stanley Hotel, Estes Park, Colorado, Sept. 1-6, 1960.

Southwestern Medical Association, 42nd Annual Meeting, Hotel Hilton, El Paso, Oct. 20-22, 1960.

Southwest Obstetrical and Gynecological Society, Annual Meeting, Riviera Hotel, Las Vegas, Nev., Nov. 7-8, 1960.



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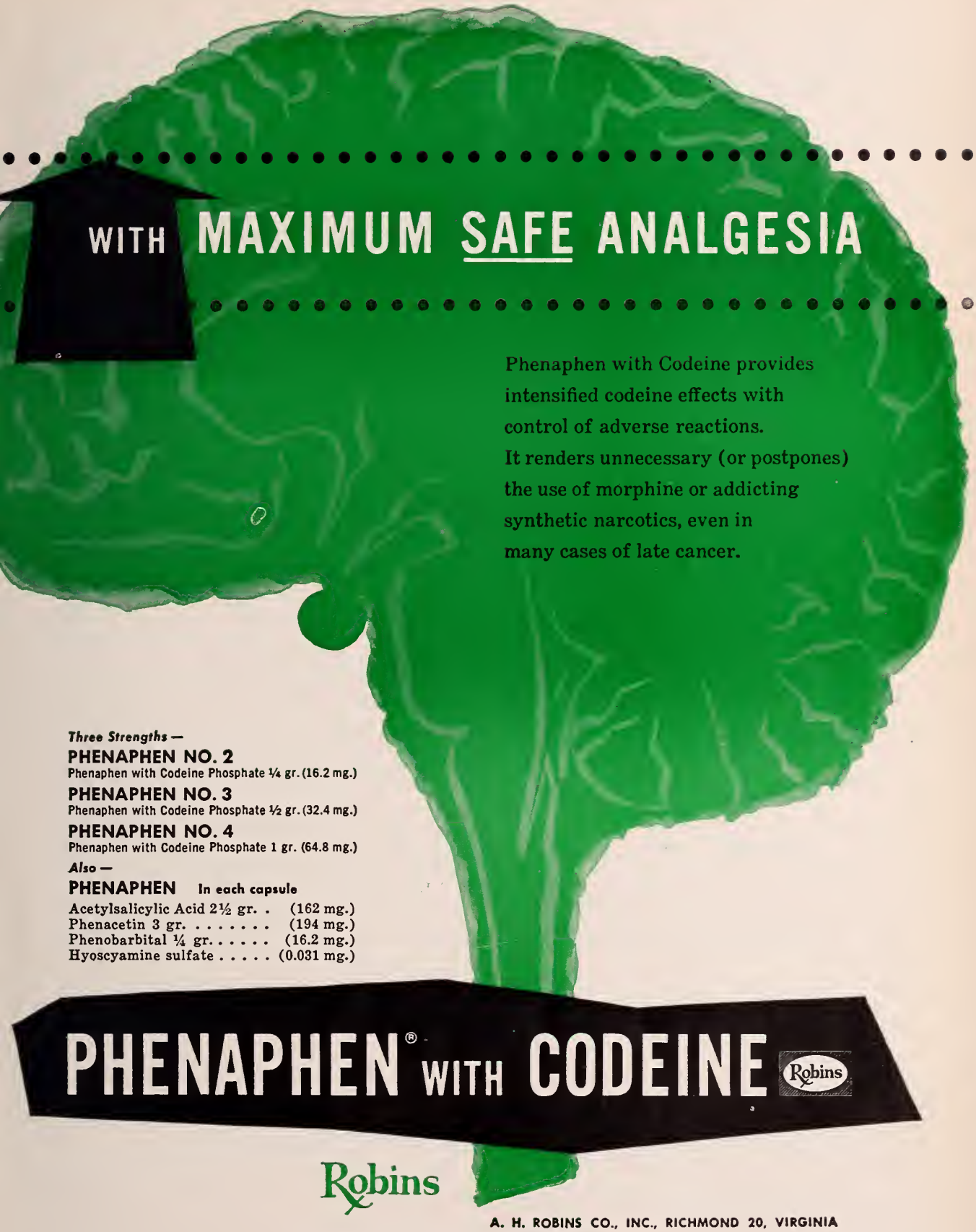
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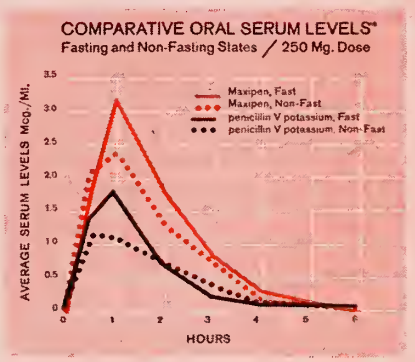
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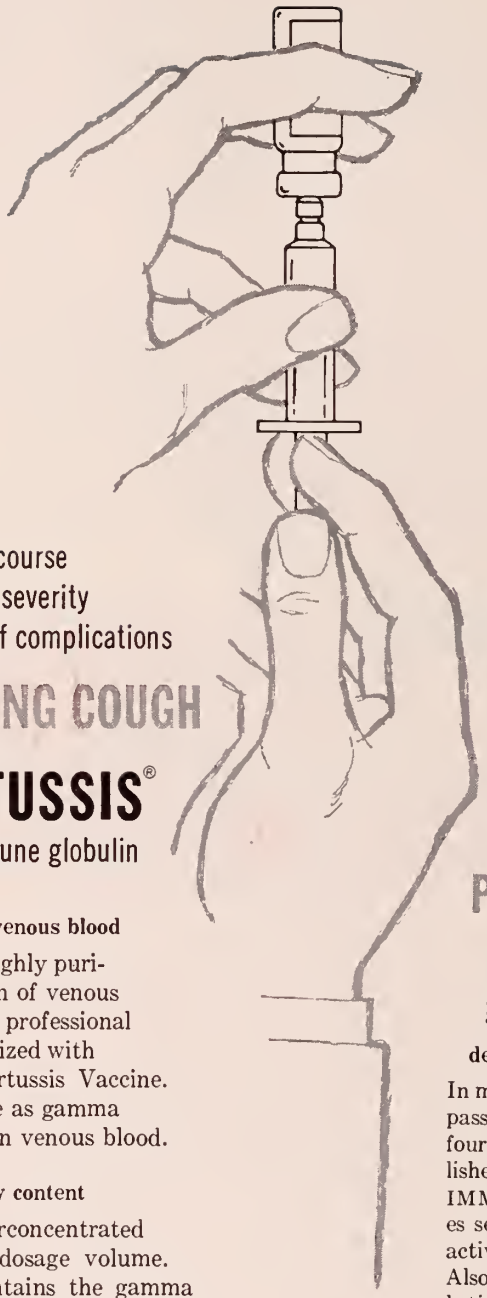
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SOUTHWESTERN MEDICINE

VOL. XLI, NO. 5 MAY, 1960

Must Time Take its Toll?

(An Excerpt)*

By Theodore G. Klumpp, M.D., *President, Winthrop Laboratories, New York*

The scientific procession moves slowly. Observing, recording and reporting medical facts also takes time. Months and years sometimes elapse before the reported facts are confirmed and generally accepted. At the same time competent investigators understandingly concentrate on a small facet of a large over-all problem, something that can be confined within the boundaries of a valid and precisely controlled entity. This often means that scientific facts are communicated bits of information scattered throughout the scientific literature.

There is often a long lag in sweeping together these odds and ends of scientific information and fitting the pieces together into a logical pattern from which one can draw action conclusions that can be confidently applied to human experience. For one thing, the more rigidly an investigator is steeped in the scientific method, the more reluctant he is to venture into realms beyond his own direct experience. Knowledge is never complete; there is always a missing piece that could or should be added to make the picture perfect.

The Atom Bomb

For instance when the atomic bomb was being developed on the Manhattan Project, the scientists collaborating in the work were unable to bring themselves to an end point where they were willing to acknowledge that they had developed a functionally usable and reliable atomic bomb. "Give us just a little more time to work out this, that or the other thing" they pled.

Meanwhile, the war continued and a decision had to be made to plan to drop a bomb or prepare for an all-out assault on the mainland of Japan, with its projected toll of some 100,000 American casualties. The President of the United States became impatient with the quest for perfection, and designated Crawford Greenwalt, now president of the DuPont Company, to study the project and freeze the research at a point where in his judgment, a workable, if perhaps less than perfect, atomic bomb was reasonably assured.

Important Point

I cite this true story not as a criticism of scientists, which is farthest from my intention, but to illustrate a most important point:

In the utilization of knowledge, particularly in the field of human welfare, we cannot always wait for complete scientific agreement, for absolute certainty before employing to the benefit of mankind such knowledge, imperfect and incomplete as it may be. In order to save years and even generations of time, we are justified in applying working hypotheses based on a reasonably high order of probability. This entails the risk that we may sometimes be wrong, but I have no question in my mind that it is far more desirable to give useful employment to knowledge as early as possible, and run the risk of being wrong occasionally

*This excerpt represents part of an address presented at a symposium on "Aging" in January in Albuquerque.

than to hold off until those distant scientific millenia when everybody agrees. We must remember that a fact is not a fact as long as its validity is seriously questioned.

In the study of the problems of aging we are particularly confronted with such a situation. The achievement of absolute and unquestioned scientific proof of the many basic facts concerning the aging process will take time, perhaps years and generations in the life of man. Are we to sit by and do nothing until the pieces of information are collated and nailed down as solid facts? Or are we justified in taking the best we have at the time as working hypotheses and applying them to useful ends? I think we are.

After all, we do pretty well treating many conditions such as diabetes, arthritis, and cancer without knowing even their basic nature. In applying what little we know we can often turn to basic biologic and physiologic principles for guidance. With all the conflicts of opinions and impressions, the history of medical science has demonstrated over and over again that those views in accord with such basic principles will eventually turn out to have been correct.

Certain Principles

With these considerations in mind, I would like to discuss certain principles that appear to have a bearing on the aging process.

Arteriosclerosis, or atherosclerosis, if you will, appears to be the most important present limiting factor in our life span. It is the basic process responsible for the preponderance of deaths due to coronary and cerebral thrombosis, cerebral hemorrhage, and the kidney disease of adult life. It causes over a million deaths annually, and the evidence indicates that the toll is rising. While atherosclerosis emerges and develops as man ages, there are good reasons for believing that it is not in itself the basic aging process. It is merely a hitch hiker that goes along for the ride. It does not occur at all in certain animals as they age. It appears not infrequently in children, particularly diabetics, and at times there is remarkably little evidence of it found in older persons who have died of some other unrelated condition. It appears most pronouncedly in association with obesity, diabetes and severe hypothyroidism.

To throw up our hands and say that atherosclerosis is merely something that is inherited is to say nothing. The mere observation that the same change may take place in related individuals is interesting, not at all surprising, and of no consequence in getting at its fundamental nature. There is a physical or chemical change that is responsible for this phenomenon, and this is what we are primarily interested in identifying.

Strange Circumstance

It is a strange circumstance that disability and death from atherosclerosis should be on the increase coincident with the phenomenal advances in our civilization, and standard of living, a period marked by so many other gains in health, comfort, and human well-being. Some of this apparent increase is due to more accurate diagnosis and the fact that other causes of death, which have claimed young lives, have been reduced. Nevertheless most students of the subject are convinced that the increase is real in both a relative and absolute sense.

Some have ascribed this situation to the anxieties and tensions of the modern world. Unfortunately, I cannot find this explanation convincing. Since the dawn of civilization every age has had its tensions and anxieties which I have no doubt, have always seemed the worst ever to those living at the time. By what standard, by what instrument of precision, are we qualified to conclude that now has come the ultimate. I rather suspect that the lurking dangers of the jungle, the savage terror of the unknown, the looming threat of pestilence and famine were just as real worries in times gone by as the atomic bomb is today.

But more important than national or international tensions as sources of anxiety, are the personal every day problems of the individual. His own individual disappointments, frustrations, losses and bereavements are the more potent, real and immediate sources of anxiety and these have been present so long as man has enjoyed the mental and emotional attributes of a human being.

The so called swift tempo of modern living has significance only in how we adjust or react to it. One man can fly at 2,000 miles an hour and feel as if he were standing still. Another rolls along with a horse and buggy and feels as if he were

flying. Indeed were strain, tension and anxiety the critical factors in the cause of heart attacks and similar vascular accidents, I see no reason why they should not occur more commonly in young individuals where these forces are often at their maximum intensity.

On the other hand, all the evidence points to arteriosclerosis as the basis of heart attacks and strokes and I have found no convincing explanation of the role of anxiety in the development of this process.

Other Factors

But perhaps there are other factors in our civilization and way of life that should be considered as possibly having a bearing on the increased incidence of arteriosclerotic heart and vascular disease. Perhaps not all the products of technological gain have been beneficial to man. It would be surprising if they were. Our scientists and engineers have been and are increasingly on a mad rampage to develop not only labor saving devices but every conceivable gadget to enable man to avoid effort, exertion and activity, whether it saves labor or not.

We no longer tend the furnace, or carry out the ashes; we drive a block for a newspaper instead of walking, and for even this we no longer need use muscles to steer, apply the brakes- or open the windows, and we are more tired than our fathers and fathers' fathers used to be when they ran, walked, chopped wood, shoveled snow, dug ditches, pitched hay, stoked the furnace and did all the physical chores so abhorrent to the mid-twentieth century.

Have you ever seen anyone take a single step on a moving escalator? If you have, it was probably some odd ball like Hans Kraus of New York or Doctor Klumpp. We are imbued with the idea, without the benefit of scientific rationale, that physical exertion and stress, particularly in adult life and middle age, is harmful. This has taken the form of a national psychosis that has swept the country like an ancient plague. We are afraid to live for fear of dying.

It was Theodore H. White who said that the history of contemporary civilization is the story of the displacement of food as the principle source of energy by coal, petroleum, water power, gas, and I may add, atomic fission. But we go right on stoking our human furnaces as we did when brawn and muscle power made the wheels of the world go round. Does all of this carry with it a penalty in terms of the degenerative diseases, heart disease, and arteriosclerosis. We don't know, but some of us are beginning to suspect that it might.

Biological Principles

Two important fundamental biological principles appear to have application to what we are talking about. The first is this: Tissues and functions that are not used, atrophy. There is no argument about the application of this principle to muscle tissue. We must not forget that the functional capacity of the heart and blood vessels is derived from their muscular structure and the manifestations of atrophy in these organs are clearly evident at all ages in the shortness of breath and reduction in work capacity that results from disuse.

To me one of the most striking demonstrations of this is the astonishing rapidity and extent of the physical and circulatory deterioration that takes place as the result of a short period of immobilization in bed. In addition to the manifest effects in terms of circulation and muscles, we know that the bones lose their calcium, joints stiffen, clots form in the blood vessels, digestion is impaired, and the bowels and organs of excretion lose their functional efficiency.

I have no doubt that the endocrines, in their delicately balanced interrelationship, suffer also. This immobilization in bed, and its effects, differ only in degree from the immobilization resulting from our so-called labor saving devices and present day attitudes toward physical activity.

Loss of Motivation

Based on loss of motivation and interest and to a large extent because of the fear psychosis against exercise and exertion, our middle aged and older people reduce their physical activities still further, to the same effect and with what I believe is especially damaging, if not disastrous results.

In addition to the consequences previously noted, atrophy of disuse accentuates the lessened capacity of older persons to react to stress. I have no doubt that such avoidable atrophy is a contributing factor in the death of older persons

subjected to accidents, shock, operations, deprivation, stress and prolonged illnesses.

Aside from its functional aspects, it is a depressing thing to see what can happen to the human figure, a thing of most exquisite beauty until misshapen by fat, atrophy, bulges, swellings, protuberances, pendulosities, and hernias. These are not necessary concomitants of the aging process, as the fine figures of many elderly ladies and gentlemen without corsets, girdles, belts and trusses bear witness.

So much has been said and written about the harmful effects of stress that I'm afraid we have been left with an entirely lop sided view of its biological role. It has not been made entirely clear that extremes of stress, from the standpoint of intensity or duration, are harmful. In this connection, from a biological viewpoint, it is safe to assume that extremes of any kind are harmful. Like potent medicines, the proper dosage is beneficial and even life saving; too much is poison.

In a similar way I look upon moderate or graded stress as necessary to the maintenance of good health, vitality, and an adequate reserve against the extremes of stress that in one way or another befall all of us. From a biological standpoint functional capacities of all systems of the body can only be augmented through moderate stress. This I have no doubt applies to the mind and emotions as well as the rest of the body.

This principle has, I believe, particular application to the aging process. After the prime of life, the peak of which comes at different times for the various functions of the body, a decline occurs. In my opinion this decline will proceed more slowly if the bodily functions are fully employed and through moderate and unfortunately descending stress, they are held to their maximum capacities.

What I consider one of the most important biological principles has a bearing on this subject and it is this, "Nature tends to eliminate those who have relinquished their functional usefulness."

Unfortunately nature does not appear to favor mind over matter, and the full utilization of only our mental capacities does not appear to be enough. I believe that we must do everything we can, as we grow older, to resist the inclination to slow down the tempo of our living. I am convinced that if you will just sit and wait for death to come along, you will not have to wait so long.

1450 Broadway

WEST TEXAS NEWCOMERS—Physicians who have joined the membership of District One of the Texas Medical Association in West Texas are shown at the District One meeting in Pecos, February 5, and are, left to right, Dr. Arnold Briere, Pecos, Dr. J. D. Lancaster, Fort Stockton, Dr. J. R. Powell, Pecos, Dr. C. E. Jones, Fort Stockton, and Dr. William G. Smith, El Paso.





Dr. Deter

THE PRESIDENT'S PAGE

By Russell L. Deter, M.D., *El Paso*
President Southwestern Medical Association

New Horizons in Hospital Care Costs

The cost of hospitalization must continue to go up as long as cost of living continues to rise. Salaries, cost of materials, depreciation, replacement, social security and retirement plans are all parts of the rising cost of hospital care. This cost increase is estimated to be in the neighborhood of a 5 per cent increase per year and will continue to rise at this rate for an indefinite period of time.*

"There should be no reason for the medical profession or the hospitals to be the least bit apologetic, or sensitive, about this cost problem, but, rather, a concerted effort should be made by us to explain to the public the increases in the 'quality and quantity of professional and technical services provided per admission, resulting from scientific advances' which have been responsible, in the main, for this increase in cost of hospital care, when understandably coupled with working conditions for employees."

What are some of the things that are being done to cut hospital costs? What can we, as physicians, do about it?

Progressive patient care is an experiment to cut down length of time a patient remains in hospital and is graduated from intensive care to convalescent care to outpatient care. This will materially cut down in cost of hospital construction and numbers of technical personnel required to care for patients in general.

Staff Reduction

By concentrating your more highly trained — therefore more highly paid — staff in the intensive care unit, the total number of these people can be markedly reduced with considerable saving to the patient. An uncomplicated appendectomy patient would stay two to three days in intensive care at $25 a day; three more days in convalescent care at $8 a day, and the rest of recovery as outpatient, at virtually no cost. The same may be applied to all other forms of hospitalization in varying degrees.

An item of considerable importance is the difference in cost of an intensive care bed at say $25,000 per bed (including all necessary facilities) as compared to $5,000 to $8,000 for a convalescent care bed. By far the majority of patients could be handled for a greater portion of their hospitalization in a much cheaper constructed, and cheaper operated convalescent care bed. Their care could certainly be much cheaper and more carefully followed in an adequate outpatient facility equipped with occupational and physical therapy departments.

Improved Patient Care

By this method the bulk of the specialized technical staff could devote the greater part of their energies to the relatively short period the patient was in the intensive care unit. Under

*From a speech by Mr. W. P. Erngay, Immediate Past President, Texas Hospital Association Administrator, Harris Hospital, Ft. Worth, Texas, made to the conference of county society officials of Texas Medical Association, 16 Jan. 1960.

this arrangement a still better dividend to the patient than reduced cost alone, would be vastly improved patient care at a time he needs it the most.

Automation is the means by which industry has cut operating costs and improved efficiency of its operations. Hospitals can and must avail themselves of all of the time and personnel saving devices made available through the vast technology of our industries. These include.

1. Vacuum tubes of sufficient size to handle small items — ie., suture sets, most pharmacy items, all requisitions and many supplies — can easily be installed in all new construction, cutting down immeasurably in time and the number of people it takes to secure these items by conventional means.

2. Automatic distribution systems of conveyor belts and vertical conveyors, much as in industry, can be used for delivery of bulk supplies (food trays, etc.) to central areas on each floor, close to the nurses' station, with a minimum need of maintenance and personnel.

3. Centralization of supplies with one dispatch center for the entire hospital will save time in the number of places one has to go for various kinds of supplies.

4. Placing in a patient's room as much as possible that is needed for his care will cut down on the time required to search for the necessary items.

5. Adequate intercom systems will cut down walking back and forth for information and supplies.

6. Streamlining records and requisition procedure will permit nurses to devote the bulk of their time to bedside nursing care.

7. Central typing and dictation pool will eliminate much duplication in personnel and material.

8. Microfilming whenever possible will save storage space.

These are only a few of the many means at our disposal effectively to cut down operation costs. Admittedly many of these procedures are not applicable to hospitals already in operation but certainly can economically be incorporated in new hospital construction. One such hospital is in operation using 1.5 employees per patient, where the national average is 2.1 employees per patient.

Pendulum Swings

Finally, the pendulum must swing away to a certain extent from the hospital to home and outpatient care. By this I do not mean that the work of hospitals and doctors in the past 50 years towards convincing patients that they can be better cared for in hospitals should be thrown out the window, but the hospital is not a rest home— it is not the place to go for a diagnostic survey, though such a survey probably can be done there better although much more expensively. The economics of being sick must be considered when the physician advises a patient to be hospitalized. To digress a moment — I like to think of it as the economics of staying well rather than "of being sick."

The chief purpose of this editorial is to call to your attention what has been done, what is being done, and what you can do to keep down the cost of hospitalization, although utilizing it to its maximum efficiency when you do use it. Keep in mind we all are the "someone else" who are paying the bill.

Phoenix Physicians to Hear California Psychologist

Bruno Klopfer, Ph.D., Clinical Professor of Psychology at the University of California, Los Angeles, will speak on "The Scientific Basis of Psychiatric Diagnosis" at Camelback Hospital, Phoenix, Arizona, on May 17th. Dr. Klopfer will address the members of the Maricopa County Medical Society who have been invited to attend the regular Tuesday morning staff breakfast by Dr. Otto L. Bendheim, Medical Director of Camelback Hospital.

Dr. Klopfer is one of the outstanding authorities on Rorschach testing and is the author of numerous books on the Rorschach technique, among which two volumes, "Technique & Theory" and "Fields of Application," deal with developments in Rorschach technique.

Aphoristic Quotes

Collected by Andrew M. Babey, M.D., *Las Cruces, N. M.*

From Medical Grand Rounds, edited by Robert McCombs, M.D., Boston, in the Bulletin of Tufts-New England Medical Center.



Dr. Babey

1. Intractable pain from cancer of abdominal viscera is usually due to invasion of the parietes. Sympathectomy is not as a rule successful in relieving pain of this type. The most practical way to give relief is by anterolateral chordotomy. Unilateral operations are often successful; bilateral operations can be done if necessary, without producing serious minor disability.

2. The cause of relapsing nonsuppurative panniculitis (Weber-Christian's disease) is not known. It is considered by some to be the most benign of the collagen diseases and therefore possibly initiated by some allergic mechanism. Drug sensitivity has been postulated as a cause. For this reason a trial of therapy with cortisone or ACTH is warranted. There is no proof that this disease is related to a form of panniculitis that occurs in epidemics in mink.

Recurrent Hemorrhage

3. Recurrent hemorrhage from esophageal varices is the chief indication for the performance of an operation in which the portal venous circulation is anastamosed to the renal vein (splenorenal shunt) or to the vena cava (portacaval).

When portal hypertension is due to cirrhosis of the liver the portacaval shunt is the preferable procedure but the operation should be deferred in instances where liver damage is severe, because of the high operative risk, until after an attempt has been made to improve liver function by a period of medical management.

When the venous obstruction is caused by extrahepatic factors, such as portal vein thrombosis, operation need not be delayed. In many of these cases the spleen may be enlarged and the effects of hypersplenism (anemia, leukopenia, and thrombocytopenia) apparent. Removal of the spleen has an additional beneficial effect on the hematologic picture.

Bilateral Ureterosigmoidostomy

4. Bilateral ureterosigmoidostomy may become necessary for various reasons, including surgical removal of the bladder because of cancer, and as a means of treating chronic urinary incontinence when other surgical measures have failed.

Use can be made of the large bowel as a reservoir for the urine in these instances. Since the colon has considerable resorptive capacity, and since the urine contains electrolytes in concentrations differing from those of the blood, certain electrolyte disturbances in the blood and other body fluids must be combated.

For example, resorption of chloride, which is normally present in high concentration in the urine, may induce hyperchloremic acidosis, particularly when the urine is permitted to stagnate in the bowel for from eight to twelve hours.

This situation can be prevented by evacuation of the colon at strictly regular intervals and a diet that contains 1.3 parts of sodium to 1 part of chloride (the same ratio that exists between these electrolytes in normal body fluids) so that the urine will not contain an excess of chloride. If necessary the extra sodium is given as bicarbonate. Azotemia may also occur, perhaps by resorption of urea from the bowel.

MEETINGS

13 Guest Speakers to Present Papers at New Mexico Meeting in Albuquerque

At the 78th annual meeting of the New Mexico Medical Society in Albuquerque, May 10-14, thirteen guest speakers will present scientific papers in the fields of obstetrics and gynecology, pediatrics, otolaryngology, internal medicine, neuro-psychiatry, physical medicine and rehabilitation, surgery, and dermatology. In addition to formal presentations, there will be the following group scientific programs:

"Problems of the Newborn," "Problems of the Special Senses," "Cardio-Pulmonary Problems of the Aged," "Problems of the Skin," and "Infectious Disease Control." There also will be several panel discussions. The program is designed to be of interest to every practicing physician.

The committee in charge of the meeting announces that a physical examination will be given at the meeting by the Bernalillo County chapter of the American Academy of General Practice to any doctor desiring one.

Record in Technical Exhibits

The largest array of technical exhibits ever assembled at a New Mexico medical convention will be shown. Forty-nine firms have reserved space to display new drugs and equipment. There will be nine scientific exhibits displayed.

Claud Gordon's orchestra will play for the dinner dance on May 12. Gordon's orchestra won the top band title of the United States and Canada in the American Federation of Musicians' best new band contest in 1959. Gordon competed against 183 bands for this coveted honor. The dinner dance will be held in the new Four Hills Country Club.

Headquarters for the meeting will be at the Western Skies Hotel.

Hypertension to be Subject of El Paso Postgraduate Meeting

A one day course on hypertension will be given by the El Paso division of the University of Texas Postgraduate School of Medicine Sunday, May 8, 1960, in the El Paso County Medical Society's Turner Home at 1301 Montana Avenue in El Paso.

Dr. J. Leighton Green, director, has announced that the course has been approved by the Texas Academy of General Practice for seven hours in Category I credit.

The instructor in charge will be Dr. Don W. Chapman of Houston. The program is as follows:

9:00- 9:55 A.M.	Diagnosis and Surgical Management of Cerebral Vascular Insufficiency. Dr. George C. Morris, Jr., Houston
9:55-10:50	Heart Disease in Pregnancy. Dr. Don W. Chapman, Houston
10:50-11:05	Intermission
11:05-12:00	Newer Concepts of Toxemia of Pregnancy Dr. Stanley F. Rogers, Houston
1:00- 1:55 P.M.	Surgical Treatment of Hypertension. Dr. George C. Morris, Jr.
1:55- 2:50	Medical Treatment of Hypertension. Dr. Don W. Chapman
2:50- 3:10	Intermission
3:10- 4:05	Chronic Pyelonephritis. Dr. Stanley F. Rogers
4:05- 5:00	Symposium on Hypertension and Arteriosclerosis. Drs. Morris, Chapman and Rogers

ORIGINAL ARTICLES

De Quervain's Disease (Syndrome)*

By James H. Cherry, M.D. and Sam M. Yates, M.D., *Galveston***

Stenosing Tendovaginitis of the Abductor Longus and the Extensor Brevis Tendons to the Thumb at the Radial Styloid Process

Due to the lack of knowledge of the true pathology and the clinical manifestations of this syndrome, it was thought until recent years that this condition, which involves the function of the thumb and wrist, was relatively uncommon. Fortunately, due to the contributions of several persons made in recent years, we have come to recognize it and treat it accordingly. Leao[1] of Brazil gives Tillaux the credit for first describing this condition in 1892 in *Traite D'Anatomie Topographique Avec Applications a la Chirurgie.*[2]

One of the first published descriptions was in 1893 in the Thirteenth Edition of Gray's *Anatomy.* At that time it was given the name as "washerwomen's sprain," and one of the cases which we are presenting, interestingly enough, received her difficulty from the old-fashioned way of repeatedly wringing out her wash with her hands and wrists, rather than using the new-fangled electric gadgets which she had ready access to use, working for a very fine family which could very easily afford her whatever mechanical machines necessary to do the family washing.

De Quervain,[3] in 1895, published the first accredited definite and detailed description with the adjoining physiologic and pathologic aspects. He also gave the first real outline of the clinical symptoms, organic findings and the definitive treatment—hence the name "de Quervain's Disease."

It has often been diagnosed or rather misdiagnosed as a sprain, strain, bursitis, periosteitis, *tenosynovitis,* arthritis, localized infection; such as tuberculosis, osteomyelitis, and other similar conditions.[4, 5, 6]

In respect to ordinary tenosynovitis, due to trauma, acute or repeated, and not due to specific infection or rheumatoid arthritis, it should be emphasized that there is a clear pathologic and functional differential picture between that condition and de Quervain's syndrome in the chronic stage.

Most orthopedists and pathologists refer to the latter as a condition which primarily involves the fibrous tissue cells overlying the vaginal or synovial cells which are normally and anatomically next to the tendon proper.

In a true tenosynovitis, the synovial cells are primarily swollen and inflamed; also, in tenosynovitis the mucin-producing cells of the tendovaginal sheath often swell to a point where upon palpation there is a definite mushy crepitation and some creaking upon motion of the tendon as it slides back and forth in the synovial tube.

In most of these cases, proper conservative therapy will allow the condition to subside, giving Mother Nature the chance to correct her own wrongs. Immobilization, local injections with hydrocortisone, properly supervised physical medicine, and sometimes X-ray therapy will hasten the recovery.

On the contrary, once the stenosing tendovaginitis of de Quervain (thumb short extensor and the abductor brevis) has established itself into a chronic condition, the only permanent relief resolves itself into either not using the thumb and wrist or surgery. Since one does not like to go through life too long without using one's thumb, then the logical course is surgical intervention.

---

*Presented at the meeting of the Texas Orthopaedic Association, San Antonio, Texas, April 20, 1959. Discussion by Dr. David M. Cameron, El Paso, Texas.

**From the Department of Surgery, Orthopedic Division, University of Texas Medical Branch, Galveston, Texas.

Practically all of the authors whose papers I have had opportunity to review, agree to resecting a portion of the sheath as it emerges over the radial styloid process. Along with that, the tendon ring should be incised. We often see a similar situation in the flexor tendons to the other fingers and to the toes, particularly at the wrist and the interphalangeal joints. In the beginning, conservative treatment with immobilization has been tried, and in some cases it has been helpful.[1]

In these cases, the repeated use of the thumb and index finger is elicited in the history. Dr. A. R. Smith,[8] Orthopedist of Columbus, Ohio, recently told me that he has seen a good number of cases in men in which most of them worked for a large electric manufacturing company where the use of the first two digits was very necessary, especially in the manufacture of electronic articles. This is somewhat contrary to the basic reports in the medical literature, in that the condition seems to occur more frequently in women—three to one over men.

Hobbies as well as other occupations have been listed in the literature. One case was reported concerning an ardent fly-casting fisherman; in addition, there were cases of a golfer, a baseball player, surgeons, and a preacher who could supplement his elecutionary theology with manifest active gesticulation.[9]

Examination

Examination will usually show an unilateral swelling of the wrist just over the radial styloid process extending about one and one-half to two inches above the wrist in alignment with the short thumb extensor and the abductor longus. The process is usually quite hard throughout, but there may be a soft center. It is often quite painful and tender, and upon flexion of the thumb towards the fifth digit, the tenderness upon pressure increases accordingly.

There is present a considerable difficulty to hold small objects, such as a piece of paper, between the thumb and the index finger (Finkelstein's test).[7, 10] Upon extension of the thumb after flexion, acute pain may recur, and quite often temporary locking of the tendon may take place, due to the increased fibrosis of the tendon sheath and the secondary hypertrophy of the tendon pully or ring.

Secondary general disease is not ordinarily present,[8] although one patient in our series did have diabetes mellitus which, in the opinion of the internist in this case and myself, had nothing to do with the tendon situation.

As has been indicated, the two tendons chiefly involved are the abductor pollicis longus and the extensor brevis tendons leading to the thumb of either or both hands. After surgical exposure either by curved, linear or transverse incision (the authors prefer either the curved or linear-longitudinal), preferably four to five inches in length, immediately over the radial styloid from base of thumb upward, the posterior sensory cutaneous branch of the radial nerve is exposed.

Both the dorsal, volar and extraneous branches, if present, are gently retracted in their given directions after careful dissection. The dorsal carpal ligament is then exposed and detached from its radial insertion and retracted. Underneath this immediate area will usually be found the main mass involving the sheath of the named tendons and the ring, the latter usually being difficult to identify because of its coherent attachment to the sheath from the sclerosing process.

Care should be taken to excise completely the entire mass around the tendons, particular attention being given to the portion immediately overlying the radial styloid. The slick gliding surface along with the periosteum of this area may occasionally be infiltrated with the mass.

Variations with accessories of these tendons are frequently encountered.[1, 11, 12] Less frequently, the extensor longus tendon in this area may also be involved. Figure 1 demonstrates the dissection in a cadaver.



Figure 1

Anatomical illustration with identification as follows: (A) Extensor pollicis brevis; (B) Abductor pollicis longus; (C) Extensor pollicis longus; (D) Radial nerve.

The tendon sheath (and ring) which has been dissected free from around the involved tendons feels hard and thickened representing chiefly an hypertrophied fibrositic mass. Microscopically, the synovial lining is usually intact and the cells of the membrane show no inflammatory cellular infiltration or swelling. (This is in contrast to the usual picture of acute and chronic tenosynovitis regardless of the cause.)

There is a marked proliferation of the subsynovial fibrous tissue cells with increased collagenous material in the fibers extending from the cells. There will be found occasional mononuclear cell infiltration but no true infectious inflammatory reaction.

The fibrous cellular tissue extends throughout the outer layer of the sheath and most often into the pulley ring. The involvement may extend up to three or four inches in length into the proximal portions of the tendons. Therefore, surgical dissection above and below the process should be extensive. (Fig. 2 and Fig. 3.)

Table I includes the cases which we are reporting in this paper.

Summary

1. A review of the literature of de Quervain's disease has been outlined along an analysis of the

TABLE I

Case	Sex	Race	Age	Duration	Side	Trauma	Recurrence	Illness	Treatment	Result	Comment
1	F	C	36	1 week	Right	Repeated	3 years	None	Casting	Good	Waitress
2	M	W	45	5 months	Right	Repeated–on crutches	None	Knee Arthritis	Surgery	Good	Longshoreman—insurance case
3	F	W	50	7 months	Right	Repeated	None	None	Surgery	Good	Housewife
4	F	C	36	3 years	Right	Repeated	None	None	Surgery	Good	Housewife
5	F	C	37	2 months	Left	Questionable	None	None	Surgery	Good	Maid—Hospital
6	F	W	64	1 year	Right	Repeated	None	Hypertension	Casting	Good	Waitress—osteoporosis
7	F	W	36	1 year	Left	None	None	Myositis of left thigh	Surgery	Good	Housewife
8	F	W	38	6 months?	Right	None	Left wrist	Myositis of left thigh	Surgery	Good	Housewife
9	F	C	26	2 months	Right	Sprain	None	None	Casting	Good	Waitress
10	F	C	41	2 months	Right	None?	None	Backache	Casting	Good	Aide–Fisherwoman
11	F	C	36	3 months	Right	Repeated	2½ years	Tonsillitis	Physical therapy—Casting	Good	Waitress
12	F	C	51	3 months	Left	Repeated: Direct blow	None	Spinal osteoarthritis	Surgery	Good	Seamstress
13	M	W	21	5 months	Right	Nonunion fracture, radial styloid	None	None	Surgery	Good	Painter
14	F	C	50	1 year	Left	None	None	Extensive abdominal surgery	Casting Surgery	1st result poor Good	Cook
15	M	W	50	1 year	Left	Rolling pipe injury	None	Associated radial hematoma	Untreated	Poor	Longshoreman
16	M	W	39	5 weeks	Right	Weight lifter	None	Left tennis elbow	Under care		Attorney
17	F	C	53	5 years	Both	Repeated	Both	None	Surgery, left	Good	Washerwoman

Note: These cases are recorded both from the staff files of John Sealy Hospital, Department of Surgery, Orthopedic Division, University of Texas Medical Branch, Galveston, Texas, and from private files.



Figure 2

Section taken from reported case illustrates proliferation of the subsynovial tissues. (X200)

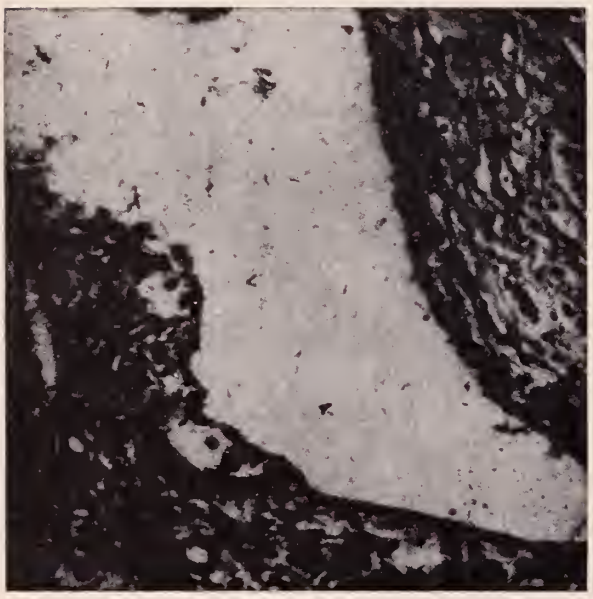


Figure 3

Section illustrates that the synovial membrane is intact which is different from tenosynovitis. (X200)

anatomic and pathologic manifestations. Especial attention is called to the recent article of Luiz Leao of Brazil in the October 1958 issue of *The Journal of Bone and Joint Surgery.*

2. A total of seventeen cases has been presented.

3. Thirteen of these cases were females and four were males.

4. The average age was approximately forty years.

5. The right hand was involved in eleven cases, the left in five, and in one case both hands were involved.

6. Nine cases received surgical treatment, all with good results. Five cases received casting, and other conservative treatment experienced a subsidence of signs and symptoms. These were chiefly cases in the early phases of the condition. One case did not receive definitive treatment and according to last reports is still having disability. One case is still under care with conservative treatment.

7. Four cases gave the history of previous acute trauma. Seven cases gave the history of repeated stress and strain or repeated trauma.

8. The predominant occupation was that of waitress, but menial household and hospital aide activities entered into the picture. There was one case of an old type of washerwoman having the condition; an aide who was also an ardent fisherwoman; an attorney who was athletically inclined towards weight lifting. There was only one case associated with a fracture of the radial styloid process.

9. There were no cases associated with rheumatoid arthritis.

Conclusions

1. De Quervain's disease is an involvement of the fibrous tissues surrounding the synovial sheaths of the abductor longus and extensor brevis tendons to the thumb. In some cases the extensor longus tendon, with anatomic and developmental variations, is involved.

2. The pathologic studies definitely show that it is a different process than that classified as a tenosynovitis, whether it is trauma or disease.

3. Trauma, whether it is acute or repeated stress and strain, appears to be the predominant causative factor. In most of our cases, it would seem that occupation was strongly in the background; that is, in the series waitresses, maids and housewives predominated.

4. There was no history of true rheumatoid arthritis elicited in any of these cases, although in five cases there had previously occurred condi-

tions which could be classified as so-called collagenous ones.

5. It seems to occur more often in females than males.

6. Conservative treatment including casting, supervised physical therapy and occasionally local injection of novocain may help in the early cases. Local injection with hydrocortisone was not done in these reported cases.

7. Surgical excision of the hypertrophied fibrositic mass and freeing up involved tendons appears to be the definitive treatment in the chronic cases. Although a general anaesthesia or brachial plexus block with use of tourniquet seems preferable to us, this matter should be left up to the judgment of the surgeon. Many surgeons prefer local anaesthesia.

BIBLIOGRAPHY

1. Leao, Luiz: De Quervain's Disease. J. Bone and Joint Surg. 40:1063-1070, 1958.
2. Tillaux, P.: Traite D'Anatomie Topographique Avec Applications a la Chirurgie, 7th Edition, Paris, Asselin et Houzeau, 1892.
3. De Quervain, F.: Ueber Eine Form Von Chronischer Tendovain, Korresp. Be. Achevein Aerzte, 1895, 25:389.
4. Bunnell, Sterling: Surgery of the Hand. Philadelphia, J. B. Lippincott Company, 1948, 2nd Edition, 450-453; 455.
5. Shands, A. R., and Raney, R. B.: Handbook of Orthopedic Surgery. St. Louis, C. V. Mosby Company, 1942, 2nd Edition, p. 467.
6. Winterstein, O.: Uben die Beziehungen der Tendovaginitis stenosans zur Arthritis deformans. Zentralb. f. Chir. 57:-1347-1350, 1930.
7. Finkelstein, H.: Stenosing Tendovaginitis Radial Styloid Process. J. Bone and Joint Surg. 12:509, 1930.
8. Smith, A. R.: Personal communication.
9. Watson-Jones, Sir Reginald: Fractures and Joint Injuries. Baltimore, Williams and Wilkins Company, 1955, 4th Edition, 2:588-589.
10. Schneider, C. C.: Diagnosing Fiber Tendovaginitis Over Radio-Styloid (de Quervain). Surg., Gynec., and Obst. 46:846, 1928.
11. Lacey, T. H: Goldstein, L. A., and Toben, C. E.: Analytical and Clinical Study of the Variations in the Insertions of the Abductor Pollicis Longus Tendon, Associated with Stenosing Tendovaginitis. J. Bone and Joint Surg. 33-A:347, 1954.
12. Loomis, L. K.: Variations of Stenosing Tendosynovitis at the Radio-Styloid Process. J. Bone and Joint Surg. 33-A: 340, 1951.

New 28-bed Nursing Home Is Opened in El Paso

A new nursing home, Rest Haven, has been opened in El Paso by Mr. and Mrs. Thomas V. Cramer. The home, located at 2729 Porter Avenue, has a 28-bed capacity and will provide 24-hour professional service. It is designed for the care of convalescents and non-ambulatory patients as well as elderly people who desire comfortable and economical quarters. Patients arrange for their own physicians. The home is state-licensed and non-denominational. Mrs. Cramer, L.V.N., is the administrator.

The 109th Annual A.M.A. Meeting: A Forum for 2,000 Top Medical Men

The 109th annual meeting of the American Medical Association will be a forum presented by some of the nation's top scientific brains.

Approximately 2,000 physicians, all outstanding in their field, will participate in presenting the scientific program of the meeting to be held in Miami Beach, June 13-17.

There will be two general scientific meetings in the Grand Ballroom of the Fontainebleau Hotel, and other lectures, symposiums, and panel discussions in the Fontainebleau, Eden Roc Hotel, and in the new, air-conditioned Miami Beach Exhibition Hall. Sessions on dermatology, being held jointly with the Society for Investigative Dermatology, will be in the di Lido Hotel.

The opening general scientific meeting, Monday afternoon, June 13, will begin with the Joseph Goldberger Lecture on Clinical Nutrition. Dr. Carl A. Lincke, chairman of the A.M.A. Council on Scientific Assembly, will preside.

The lecture will be followed by a symposium on nutrition, including an address by Grace A. Goldsmith, professor of medicine, Tulane University School of Medicine, New Orleans, on "Highlights on the Cholesterol—Fats, Diets and the Atherosclerosis Problem."

The second general meeting will be a symposium on "Evaulation and Preparation of Patients for Anesthesia and Surgery," Tuesday morning, June 14, to which the sections on Anesthesiology, Diseases of the Chest, General Practice, Internal Medicine, Pediatrics, Pathology and Physiology, and Surgery have contributed. Participating will be Meyer Saklad, Providence; Thomas Rardin, Columbus, Ohio; Eugene Turrell, Milwaukee; John S. LaDue, New York City; Arlie R. Mansberger, Jr., Baltimore; George Meneeley, Nashville; Robert M. Smith, Boston; and C. Rollins Hanlon, St. Louis, Mo.



Clinical Experiences with Oral Anti-inflammatory Enzyme for Intestinal Absorption*

By B. W. Billow, M.D.;
A. M. Cabodeville, M.D.;
A. Stern, M.D.;
A. Palm, M.D.;
M. Robinson, M.D.;
and S. S. Paley, M.D.,
New York†

It already has been established that the enzyme, Chymotrypsin, possesses significant therapeutic and prophylactic properties. These effects include: anti-inflammatory, anti-edematous, mucolytic, fibrinolytic and thrombolytic actions.

The successful use of various preparations of Chymar (Chymotrypsin, Armour) have been documented in asthma and bronchitis;[1-2] athletic injuries;[3-5] dermatology;[6] ophthalmology;[7-8] pelvic inflammatory disease;[9] peptic ulcer;[10] general and plastic surgery,[11-12] thrombophlebitis;[5-13-14] traumatic conditions;[8] and urology.[15-16]

Methods and Materials

We have recently reported[17] on the anti-inflammatory effect of oral, buccal and parenteral chymotrypsin combined with antibiotic therapy. The preparations used were Chymar Aqueous, Chymar Buccal and Chymar Oral.* In this study we are reporting our results primarily with the oral form.

Chymoral is an enteric coated tablet containing mixed pancreatic enzymes (chymotrypsin and trypsin). Each tablet contains 50,000 units of activity.

In the initial study a dosage of one tablet q.i.d. was administered; another group of patients were given two tablets q.i.d.; and a third group were given a combination of the oral and parenteral forms, 1 c.c. of Chymotrypsin Aqueous and one tablet Chymoral q.i.d. daily.

A total of 65 cases were studied; these included commonly encountered conditions such as bronchitis, sinusitis, epididymitis, contusion, fracture, hematoma, laceration with edema, strains and sprains with edema, and thrombophlebitis.

Results

The results of the therapy in 65 patients are summarized in Tables I, II and III. Results were graded by whether improvement was complete, partial or none. Table I reveals that on a dosage of one tablet q.i.d., 20 of the 65 cases, or about 30 per cent, experienced complete relief within five days.

TABLE I

Response to Chymoral Tablets
1 tablet q.i.d.

	No. of Cases	Improvement Complete	Partial	None
1. Acute Trauma				
(a) Hematoma	4	2	2	
(b) Contusion and edema	6	2	3	1
(c) Laceration and edema	9	3	4	2
(d) Strains and sprains with edema	12	5	5	2
(e) Fracture with edema and laceration	4		3	1
2. Acute Thromphlebitis	9	3	3	3
3. Acute Tracheo Bronchitis	8	2	5	1
4. Acute Tonsillitis and Sinusitis	10	3	5	2
5. Epididymitis	3		2	1
	65	20	32	13

TABLE II

Response when Chymoral dosage was increased to two tablets q.i.d. in those patients who obtained only partial relief.

No. of Cases	Recovery Complete	Partial	None
32	28	4	0

*Chymoral, manufactured by the Armour Pharmaceutical Company.

†From the Medical Service of Harlem Hospital, Department of Hospitals, New York City.

TABLE III

Response to the addition of 1 cc. Chymar Aqueous daily in those patients who did not respond to Chymoral therapy alone.

Recovery

No. of Cases	Complete	Partial	None
13	2	6	5

Thirty-two patients who experienced only partial improvement on the dosage of one tablet q.i.d., were given an increased dosage of two tablets q.i.d. The results are in Table II. Finally, 13 patients who showed no improvement on Chymoral on a one tablet q.i.d. dosage, were given, in addition, one cc. of Chymar Aqueous daily. These results are shown in Table III.

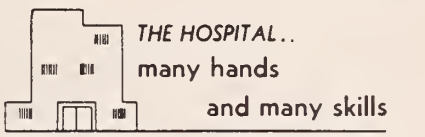
There were no toxic effects or side reactions observed in any of the patients.

Summary

Chymoral appears to be an effective anti-inflammatory preparation. From our experiences to date, we are of the opinion that Chymoral therapy should be initiated at a dosage level of two tablets q.i.d. In very severe inflammatory conditions the adjunctive use of parenteral chymotrypsin daily, for a few days seems advisable. As the condition improves, or for maintenance purposes, one tablet q.i.d. is recommended. Patients who can't take the oral form initially should be given the parenteral form until able to receive oral therapy.

References

1. Parsons, D. J.: Asthma, Bronchitis, Rhinitis and Sinusitis: Adjunctive Treatment with Intramuscular Chymotrypsin, Clinical Medicine, November, 1958.
2. Suarez-Diaz, E.: Las Enzimas en La Therapeutical Bronchopulmonar Revista de la Confederacion Medica Pan Americana, 402-405, November, 1958.
Suarez-Diaz, E.: Reprinted in Revista Medica Cubana, 52:14-23, January, 1959.
3. O'Donoghue, D. H.: General Principles Involved in the Treatment of Injuries to Athletes, Medical Times, 87:1246-1260, October, 1959.
4. Slocum, D. B.: Treatment of Football Injuries, Medical Times. 87:1261-1268, October, 1959.
5. Rachun, A.: Treating Football Injuries, Medical Times, 87: 1276-1278, October, 1959.
6. Cornbleet, T.: Use of Chymotrypsin in Dermatology, Antibiotic Medicine and Clinical Therapy, 6:21-24, January, 1959.
7. Jenkins, B. H.: (a) The Use of Intramuscular Chymotrypsin in Ocular Conditions, Reprinted in the Journal Medical Association of Georgia, October, 1956; (b) Chymotrypsin, Its Varied Uses in Eye, Ear, Nose, Throat & Related Conditions, Medical Times, 87:1613-1615, December, 1959.
8. Davis, O. F., et al.: Chymotrypsin: Clinical Pharmacological Evaluation as an Anti-Inflammatory Enzyme, Postgraduate Medicine, Vol. 26: 719-723, November, 1959.
9. Reich, W. J., & Nechtow, H.: Chymotrypsin in Pelvic Inflammatory Disease, American Practitioner & Digest of Treatment.
10. Mozan, A. A.: Chymotrypsin Therapy of Peptic Ulcer; Results in 78 cases, Postgraduate Medicine, Vol. 26:542-550, October, 1959.
11. Moore, F. T.: A Report on 75 Patients Treated with Chymar (Lyophilized Chymotrypsin), British Journal of Plastic Surgery, 11:335-339, January, 1959.
12. Morani, A. D.: (a) Clinical Experience with Enzyme (Chymar) Therapy in Wound Healing, Abstracted in Proceedings of The International Congress on Plastic Surgery, London, July 12-17, 1959; (b) Uses of Enzymes in Plastic Surgery, Jl. British Medical Women's Federation.
13. Thorek, M.: Chymar Therapy of Thrombophlebitis, Illustrated Preoperative and Postoperative Care, Lippincott, 1958, P. 82.
14. Theis, F. V..: Thermobophlebitis and Thrombosis of the Veins of the Extremities, Current Therapy, Sauders, Philadelphia, 1959, Pages 145-148.
15. Saxe, T. L.: Fracture of the Penis, Jl. Med. Soc. New Jersey, 56:614-615, October, 1959.
16. Wade, H. King, Jr.: Adjunctive Drugs in the Treatment of Urological Diseases. (Chairman's address, Southern Medical Asso. Mtg. Atlanta, Nov. 16-19,1959.) Journal Southern Med. Asso.
17. Billow, B. W., et al.: Experiences with Chymar, a New Protease, In General Hospital and Office Practice, Harlem Hosp. Bulletin, February, 1960.



Ruidoso Summer Clinics

The New Mexico Academy of General Practice will hold its annual summer clinics in Ruidoso July 18-21. Lectures will be given each morning with the remainder of the day free.

A faculty of seven from the University of Kansas Medical School will present the program. Dean Mahlon H. Delp, M.D., will moderate programs each morning, as follows:

Monday, Heart Disease; Tuesday, Mother and Child; Wednesday, Cancer; and Thursday, Emergencies.

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Painful Rib Simulating "Cardiac Neurosis"*

By J. Edward Stern, M. D., *El Paso*

There is a moderate amount of literature on the subject of painful rib and painful costochondral junction. E. Moschcowitz[1] referred to these anatomical structures as one source of parietal pain simulating visceral disease. Moschcowitz and several British observers also described pain at the free costal border due to "slipping" rib.

The disorder of painful costochondral junction, when located in the precordium, may give rise to symptoms which must be distinguished from those of anginal syndrome. The value of the distinction is not only theoretic and heuristic, but also practical and therapeutic.

For the sake of brevity and out of deference to older usage, the term "cardiac neurosis" is here employed in quotes. In present-day psychiatric terminology, however, the term psychogenic cardiovasular reaction is used. It forms a subcategory of somatization reaction, a reaction in which anxiety is relieved, to a greater or lesser extent, by channeling the originating impulses through the autonomic nervous system into the viscera.

The psychogenic cardiovascular reaction includes most cases of pseudoangina pectoris, many cases of paroxysmal tachycardia, some types of hypertension, and cases resembling neurocirculatory asthenia but without subjective anxiety. This paper is limited to a discussion of one class of pseudoangina pectoris.

Angina Pectoris

The profession has grown increasingly aware of the principles underlying the diagnosis and differential diagnosis of angina pectoris.

Paul D. White in his book "Heart Disease"[2] gives an excellent discussion of many facets of the problem. The mimicry which may derive from cervicodorsal spondylitis, esophagospasm (including globus hystericus and cardiospasm), hiatus hernia of the stomach, and so on, is generally appreciated.

The efficiency of the coronary circulation may be inferred from the effect on the electrocardiogram of exertion (A. M. Master) and, perhaps less regularly, of hypoxia (R. L. Levy). However, if the conventional, and more elaborate, methods of differential diagnosis do not yield fruitful results, the physician runs the risk of overlooking a painful zone in the precordium, of inferring a psychiatric diagnosis by exclusion, or of doing both.

These difficulties are avoided by searching the precordium for tender points and by conducting a brief psychiatric investigation, a procedure at which many internists have grown expert in recent years.

Strapping

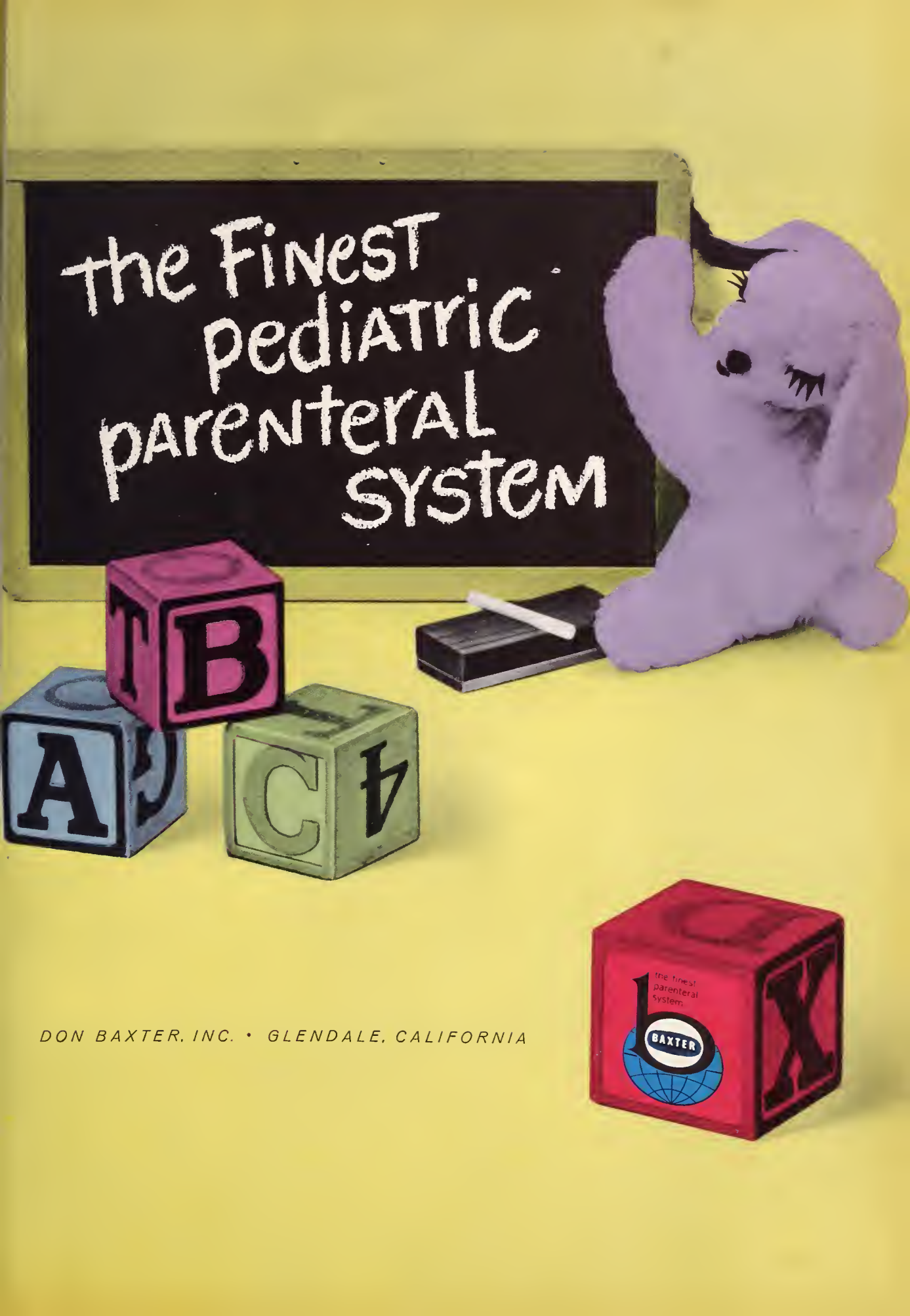
Moschcowitz wrote in 1927 (loc. cit.), "As a rule, the pain of slipping rib can be eliminated by firm immobilization with adhesive tape. This procedure aids in diagnosis. When the strapping is removed, the pain returns."

Fortunately, the outlook is now more sanguine. R. Leriche,[3] W. K. Livingston,[4] and J. Travell,[5] have shown that persistent parietal pain can sometimes be relieved in a spectacular and astonishingly durable way by the infiltration of tender points with procaine, or by spraying the skin over the sensitive area with ethylchloride, or even by needling alone.

It is quite beyond the scope of this study to go into the perhaps related questions of myalgia, nodular headache, fibrositis, and geloses; nor is it appropriate here to discuss the possible metabolic, hepatic or traumatic (?) origin of these disorders. It is also beyond the scope of this paper to discuss extensively the emphasis which Livingston placed on trigger points, on the internuncial neuronal pool in the central grey of the neuraxis (a "dynamic, central agency separate from, and eventually independent of, the original irritant focus"), on facilitation of the spinothalamic tracts, and on inhibition of the dorsal columns of the spinal cord.

Suffice it to say that clinicians in general might well devote more attention to accessible tender points in the parietes (and extremities) since a simple, useful method of relieving certain painful conditions consists in the early treat-

*Read at the Southwestern Regional Meeting, American College of Physicians.



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ment of these points, before the internuncial neuronal pool has been converted into a self-perpetuating "whirlpool." This principle has been applied in the present study.

In passing, it may be recalled that Travell drew attention to the view that skeletal muscular pain may, reflexly, produce coronary vasoconstriction and that, conversely, the pain of coronary insufficiency may, also reflexly, cause spasm of skeletal (e.g., pectoral) muscle. Although the pain of effort angina has traditionally been regarded as a protective agent, it was Travell's opinion that pain of parietal origin should be abolished, if possible, by the use of methods already mentioned.

Recent observations suggest that it may be worthwhile to furnish a reminder of the painful rib syndrome which may be confused with, or be superimposed upon, so-called cardiac neurosis, iatrogenic heart disease, and organic heart disease.

Case 1. R. H. A 32-year-old male veteran, now a hospital ward attendant, had previously suffered from a mild grade of "battle fatigue." He was seen on Dec. 3, 1951 after careful previous evaluation. In March, 1951, after painting a floor, an unaccustomed task, he noted a sharp pain in the precordium. The pain was persistent, non-exertional in the usual sense; it was intensified by certain twisting movements of the chest and by lifting objects with the hands.

Careful study of the cardiovascular system had disclosed normal conditions; there was an inconstant, functional, systolic murmur at the apex of the heart. The patient was reassured and encouraged, but the pain persisted and the patient continued to be worried about his heart. He came under observation with a diagnosis of "cardiac neurosis."

Trying Experiences

The neurological examination revealed nothing abnormal. Psychiatric examination disclosed a relatively stable personality structure with only a slight grade of anxiety, residual after trying war experiences, and apprehension about "heart trouble." There was no multiplicity of somatic symptoms. The physical examination was not remarkable except for point-tenderness at the fifth left costochondral junction.

Two cubic centimeters of two per cent procaine were injected into and around the rib at this site after infiltration of the skin and subcutaneous soft tissues. The pain was completely relieved and did not recur during a three months' period of observation. The patient had no further worry about the condition of the heart. The symptoms of anxiety were considered too trivial to require treatment.

Case 2. G. V. A 38-year-old female dental assistant, married three times, had one son aged 21. For five years she had had attacks which occurred in this sequence: pain "around the heart," palpitation, shortness of breath, fearfulness amounting to panic or angor animi, sensations of fatigue in the extremities, "nervousness," and dizziness.

The attacks had increased in frequency and severity; in recent months they occurred once or twice daily and lasted for one-half to several hours. Other symptoms included abdominal pain and backache; in an attempt to relieve these a pelvic operation had been done five years previously. General examinations and special examinations of the cardiovascular system and digestive tract gave results within normal limits.

Reassurance was of no avail; attacks of precordial pain were recurrent and troublesome; as already noted, they brought many other symptoms in their wake. The patient came under observation convinced that she had "heart trouble."

Marked Anxiety

The neurological examination revealed no abnormality. A psychiatric examination made on Jan. 21, 1952 disclosed a marked grade of anxiety and large amounts of pathogenic material at all stages of the patient's life. The physical examination was not remarkable except for point-tenderness over the left sixth costochondral junction.

Local injection of procaine gave, for one month, complete relief of the thoracic pain and of most of the other symptoms. With the recurrence of thoracic pain the patient complained of general tension and of "tired feelings" in the arms and legs, but there was no panic reaction. The pain was again relieved after the injection of procaine.

The situation was, in short, improved, but

not entirely relieved. The patient was much more comfortable and was able to separate, in her own mind, the thoracic from the neurotic symptoms. If further work along psychotherapeutic lines were required, it could be pursued without the handicap of frequent, nagging, and indeed frightening attacks of precordial pain which the patient had never been able to understand except in terms of "heart trouble."

Discussion

The diagnosis of so-called "cardiac neurosis" should not be made by exclusion. It should be made positively, by eliciting components of the anxiety syndrome in conjunction with symptoms of the psychogenic cardiovascular reaction. This is, of course, part of a general principle.

The diagnosis of a painful thoracic rib syndrome is based on the positive finding of point-tenderness of a rib, or ribs, usually, but not always, at a costochondral junction. As a rule, only one such point is present; rarely, there may be more than one. Pressure on the most tender point will, in most cases, reproduce the painful syndrome of which the patient complains. A history of twisting the thoracic cage prior to the onset of symptoms is valuable, if it can be elicited.

A method of treatment of the painful rib syndrome consists in the injection of procaine into the rib at the site of point-tenderness. Usually one, less commonly a series of injections may be required. If there is more than one tender point, only the most tender need, as a rule, be infiltrated. The injection must be made accurately. The method of treatment is not used indiscriminately, but only in cases which have received careful study and in which definite, exquisite point-tenderness is found. This is, of course, a special application of a general method.

The question is properly asked, is the method of injecting procaine into a painful rib nothing more nor less than a form of suggestion therapy? Implicit in most forms of therapy is a greater or lesser degree of suggestion. However, in the problem under consideration, other forms of therapy were unsuccessful; and perhaps more significant, inaccurate placement of the procaine will yield no useful result.

Residual anxiety symptoms, if of clinical significance, may require a psychotherapeutic approach, using principles of dynamic psychiatry, supplemented if necessary, by certain other procedures. Needless to say, the problem of psychotherapy is simplified *pari passu* with reduction or relief of the symptom of precordial pain. The reason is that an important somatopsychic factor, in the sense of the late A. Myerson, has been removed. The physician is thus in a position to follow the principle of intensifying psychiatric treatment during moderation of symptoms.

These principles are applicable to patients in whom a positive diagnosis of painful rib and functional cardiac symptoms can be made. It matters not whether one refers to the latter condition as psychogenic, "idiogenic," or iatrogenic. The same principles may, conceivably, be of value in treating some patients with underlying organic heart disease.

A general observation may be based on the foregoing. It is worthwhile to think of the more elusive medical problems not in terms of **either or,** i.e., in either psychogenic or structural terms, but in terms of **how much,** i.e., in terms of how much of the problem is functional and how much is structural. A quasi-quantitative evaluation of this sort is as valuable as it is, often, difficult.

Summary

1. The painful thoracic rib syndrome is described and discussed in relation to anginal syndrome and "cardiac neurosis."

2. Two illustrative cases are described.

3. Some general principles of psychosomatic medicine are discussed.

Thanks are extended to Doctor Eli Moschcowitz of New York for his assistance in the preparation of this report.
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Bibliography

1. Moschcowitz, E.: Pains of Parietal Origin Simulating Visceral Disease, J.A.M.A. 88: 897, (March 19) 1927.
2. White, P. D.: Heart Disease, New York, The Macmillan Company, 1944 ed. 3.
3. Leriche, R.: Surgery of Pain, London, A. Bailliere, 1939.
4. Livingston, W. K.: Pain Mechanisms, New York, The Macmillan Company, 1943.
5. Travell, J. and Rinzler, S. H.: Pain Syndrome of the Chest Muscles: Resemblance to Effort Angina and Myocardial Infarction, and Relief by Local Block, Canad. M. Assn. J. 59: 333 (Oct.) 1948.

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F. P. Bornstein, M.D., *Editor*

Case No. 1362, January 15, 1960

Presentation of case by Leigh Wilcox, M.D.

History—Dr. Nathan Kleban

"Severe stomach-ache" brought a 53-year-old Latin-American woman to the hospital at 8 o'clock on the morning of November 11, 1959.

For seven years intermittent upper abdominal bloating had occurred after meals. There had been occasional attacks of right upper abdominal quadrant pain. Pain which brought the patient to the hospital was constant, radiated to the right scapular region, began about 24 hours before admission, and was accompanied by yellow-green vomitus.

Jaundice or change in color of urine or stool had not been noted. The patient had nine children ranging in age from 13 to 34 years.

Physical Examination

The patient was admitted to the ward by wheel chair. T. 99.6. P. 80. R. 28. B.P. 114/70. Positive findings were confined to the abdomen. There was a thickened panniculus adiposus. There were diminished peristaltic sounds. The right upper quadrant was "very tender."

Hospital Course

The patient was given a fat-free diet, atropine, Probanthine, Meperidine, aspirin, potassium chloride and oxygen. The patient complained of a "large amount of pain," shortly after admission. Fluid was administered parenterally. Gastric aspiration by continuous suction was started 16 hours after admission but failed to relieve distention or pain. Pulse rate increased to 148 twelve hours after admission. There was urinary incontinence. Blood pressure was 90/50 when the Levine tube was inserted. Four hours later is was 56/30. A portable abdominal x-ray film was obtained, then repeated.

Penicillin and dihydrostreptomycin mixture, 1-arterenol and hydrocortisone were given. X-ray films of the chest and abdomen were obtained. Graham-Cole x-rays of the gallbladder had been ordered but were not done because "Telepaque tablets drawn out because of Wangensteen suction." A retention catheter was inserted into the urinary bladder. The gastric levine tube was removed and replaced 12 hours later.

Shock persisted. Death occurred about 40 hours after admission to the hospital.

Laboratory Findings

X-Rays: 11-12-59: Examination of the chest on a portable basis demonstrates evidence of atelectasis on both bases. The cardiac silhouette is difficult to equate in terms of size for technical reasons. The right diaphragm may be slightly elevated. Perhaps the displaced changes in relation to the right hemidiaphragm are due to subdiaphragmatic disease.

11-12-59: Gallbladder: Oral cholecystography fails to result in opacification of the gallbladder. The majority of the telepaque appears to be within the stomach. Assuming the patient was given the telepaque at the proper time, this is sometimes an indication of gastric obstruction. Ileus might also account for this change. The intestinal shadows present a normal distribution.

Blood Counts:

11-11-59: Hb. 14.2 gms., Ht. 43 vol.%, Segs. 76, Lymphs. 23, Monos. 1 WBC, 7,900

11-12-59: Hb. 15.9 gms., Ht. 47 vol.%, Stabs. 3, Segs. 76, Lymphs. 16, Monos. 5 WBC 12,700

Urinalyses:

11-11-59: Yellow, hazy, acid, S. G. 1.024, Albumin and sugar negative, 1-2 WBC, 2-4 RBC, few bacteria, heavy amorphous urate crystals

11-12-59: Positive for bile

Chemistry:

11-11-59: Amylase—68

11-11-59: Amylase—104

11-12-59: Amylase—690

11-11-59: Amylase—104, **11-11-59:** Amylase 104, **11-12-59:** Amylase — 690, **11-12-59:** CO2 capacity—16, Total cholesterol—191, Cholesterol esters—84 (44%), Potassium—3.7 mEq/L, Sodium—13.4 mEq/L, Total protein—7.4 mg.%, Albumin—4.9 gm.%, Globulin—2.5 gm.%, Urea Nitrogen—21.5 mg.%, Van den Bergh Direct—4.62, Indirect—7.26.

Serology:

11-11-59: Negative

Electrocardiogram:

11-12-59: Abnormal EKG due to widespread ST and T wave changes compatible with coronary artery disease and/or digitalis effect.

Clinical Discussion— Dr. Leigh Wilcox

This is the case of a 53-year-old Latin American woman who entered the hospital on the morning of November 11 with a history of seven years of intermittent upper abdominal bloating that occurred after meals, and with occasional attacks of right upper abdominal pain. Her admission complaint was severe stomach ache.

This pain which brought the patient to the hospital was constant, radiated to the right scapular region, began about 24 hours before admission, and was accompanied by vomiting, yellowish green.

There was no jaundice noted, or change in the color of the urine or stool. She was admitted by wheel chair, with one degree fever, pulse rate 80, blood pressure 115/70. Positive findings on physical examination were entirely confined to the abdomen. She was somewhat obese.

There were diminished peristaltic sounds, evidently sounds were still present, the right upper abdominal quadrant was very tender. Shortly after admission the patient complained of a large amount of pain, even after the administration of mepheridine.

She was given fluid. Gastric suction was started 16 hours after admission. It failed to relieve the distention which developed after admission and after this severe pain. Pulse rate increased, with urinary incontenence. Sixteen hours after admission here her blood pressure dropped to 90/50, 4 hours later it dropped to 56/30.

A portable abdominal x-ray film was obtained and then repeated. Shock persisted, the patient pursued a downhill course in spite of steroid, hydrocortisone, streptomycin. She died 40 hours after admission. An attempt was made on the day after admission to do a gallbladder x-ray study.

The x-rays ordered were not made because the Telepaque tablets were drawn out with the Wangensteen suction but evidently she had some of them still in her stomach. The x-rays were not too satisfactory. They show perhaps some elevation in the diaphragm, widening of the cardiac shadow.

X-Ray Discussion—Dr. Vincent Ravel

They said the patient was distended, but I don't see any ileus, and there is a little peculiar shadow under that diaphragm which may represent free air.

Dr. Wilcox:

A number of diagnoses have to be considered. The only past history is that of gas after eating and occasional attacks of right upper quadrant pain. We have exquisite apparent tenderness of the right upper quadrant on admission, and scapular pain. Her blood count shows a little increase in the polys, and some shift to the left. My first choice of diagnosis would be an acute cholecystitis followed by a perforation of the gallbladder, which probably occurred after admission. The elevation of the diaphragm might occur with such a condition. She would not necessarily develop a large amount of ileum before she died, if such a situation had occurred, and she could have had some peristalsis on admission. No comment is made on absence of peristalsis after this additional severe pain when she went into shock.

Perhaps the second bet would be an acute hemorrhagic pancreatitis, except that the amylase did not go up too high.

Third, perhaps would be a perforation of some type, such as a perforated ulcer. Her past history is not suggestive of this, and evidently on admission she was extremely rigin. Conceivable a small perforation might have occurred with little severe pain. Then additional leaking occurred after admission to give this sort of a picture.

Such things perhaps as a perforated diverticulum of the duodenum, dissecting aneurysm, some perforating lesion of a neoplastic nature, in the right colon, right hepatic flexure, might need be considered although we have nothing to indicate anything like this as far as her past history is concerned.

So my choice as far as the first diagnosis is a chronic cholecystitis with acute exacerbation and perforation; second is a pancreatitis.

The other laboratory work is not particularly significant except she does show evidence of perhaps some dehydration and a little alkylosis from

vomiting. She had a bilirubin of 4.62, that is true, but it was done on the day after admission, approximately 48 or more hours after the onset of this pain. I think almost any situation within the abdomen of this severity could produce that.

Dr. Ravel:

I think the absence of the ileus is somewhat important. I think it looks like ascites because this is an upright film. The right hemidiaphragm I believe is elevated and I think you can see the secondary compression phenomenon which again would lead you to think of a possible sub-diaphragmatic abscess or sub-hepatic abscess, liver abscess, or some intra-diaphragmatic type of lesion. Whether or not this represents free air I am not sure.

Dr. Pablo Ayub:

I would like to suggest that if this woman had a chronic gallbladder disease, she was probably more prone to have a carcinoma of the gallbladder with perforation.

Dr. F. P. Bornstein:

If this woman had cholecystitis and perforation, what would have been the contra-indication here for surgery?

Dr. Wilcox:

Well, of course I don't know what the admission impression was. If we have an acute cholecystitis of only 24 hours duration, I think most of us would feel that surgery was indicated immediately. She apparently was not in shock. Her pulse rate was 80, here her blood pressure was 114/70. I think from the findings on admission that the admission diagnosis probably would be most likely acute cholecystitis and I think surgery would be indicated. Now had she been ill say 48 hours before she came in, one might feel you should procrastinate with the situation, unless she got worse. Of course then afterwards she went into shock, apparently went on a downhill course, at no time does it appear from the protocol that she would have been in any situation to stand surgery at all.

Dr. W. R. Gaddis:

This patient came to the hospital because of pain and she subsequently died in shock. Mention was made of this patient's distention, which suction did not relieve. This is not borne out by the radiographic examination. I think that either fat was misinterpreted or there was a considerable amount of distention.

I am a little bit disturbed by the radiolucent area on the right upper diaphragm for the following reason: If one takes radiographs of patients in different positions, one view may clearly demonstrate a thin layer of air under the diaphragm while the other view because of interference with organs does not show this air. Very likely this patient had a perforated viscus.

She also had evidence of pancreatitis, with a rapidly increasing serum amylase going well above normal limits. Prior to her death she was jaundiced, if not clinically, then certainly chemically. She had an indirect Van den Bergh of 7.26 and this should have produced visible jaundice, had it been present for any appreciable period of time. That was taken on the 12th so although she may not have been clinically jaundiced, here her serum bilirubin would indicate an obstruction in the ductal system.

As Dr. Wilcox has pointed out, this patient undoubtedly had at least recurrent and chronic cholecystitis. I am wondering if she did not have a perforation of the gallbladder with early or attempted formation of a cholecystoduodenal fistula, in consequence of which there developed ascending cholangitis. She died of shock because of an acute peritonitis. I would agree with Dr. Ayub that she could have a carcinoma of the gallbladder.

History of Stones

We have had a number of primary biliary tract carcinomas always with a history of stones. We had one just last Friday in which a cholecystoduodenal fistula was demonstrated in the fundus of the gallbladder. The patient had a papillary adenocarcinoma. The stone was gone, having been extruded into the intestinal lumen and possibly passed by the patient. The cause of sudden death in patients who appear at this hospital has been very obscure in times past.

It is limited largely by our knowledge of what the patient is willing to admit on certain occasions and second by our ability to probe into them sufficiently deeply in view of their illness to ascertain what has been happening.

Many times patients mention quite casually sometimes something that is very important such as a patient I recently saw at home. After I asked her if she had been sick she said no, and that was all she said. Then about five minutes later she mentioned that fact that she took "Tums" constantly, that she awoke in the middle of the night and before breakfast, and between meals, etc. This patient subsequently had a duodenal ulcer and has recovered satisfactorily.

This patient here was unable to tell us a lot and I feel in my own mind that the decision to put this patient into surgery might have been possibly life saving but certainly it was a tre-

mendous undertaking with a condition of her rapidly falling blood pressure and deterioration.

Dr. Bornstein:

This patient did not have any jaundice when she came into the hospital. On laboratory examination she had a very definite jaundice and when I saw her 24 hours before death there was very definite visible jaundice. Now, would a carcinoma or even a stone produce visible jaundice in such short periods? What is the general experience on that point?

Dr. Gaddis:

I would say that in an individual with a dark complexion jaundice is very hard to tell and I can't imagine having a rapidly arising jaundice in 24 hourse for any reason. I think it was missed on admission.

Dr. Kleban:

I think the pertinent question in this patient and one that needs explaining by those that took care of her is this: why she wasn't treated as an acute surgical abdomen?

Dr. Wilcox:

I don't see why we have any right to criticize. After all, she only had one degree of fever, the gallbladder, while very tender, apparently was not palpable. Her white count was only 7000 and one can see a situation at least quite similar to this with simply an acute gallstone coloic and obstruction with probably very mild inflammation in the gallbladder. Of course, in retrospect after the woman went into shock and died, you can look back and say maybe she had an acute cholecystitis, then, which perforated under our nose in the hospital. I am sure we see many people with gallbladder colic that practically show as much as this woman had on admission and certainly don't advise operating on them.

Dr. Kleban:

Let me ask one other question. I don't have a knife to grind, my question is when, if ever, is a cholecystitis an acute abdomen?

Dr. Bornstein:

Not with one degree of fever and 7000 white count.

Dr. Wilcox:

If you have a diagnosis of acute cholecystitis there is little difference of opinion — within 24 or 48 hours, most of them can be operated and the gallbladder removed.

Clinical Diagnosis: Cholecystitis and cholelithiasis.

Dr. Wilcox's Diagnosis: Chronic cholecystitis with acute exacerbation.

Pathological Diagnosis: 1. Acute cholecystitis and cholelithiasis with choledocholithiasis; 2. Acute ascending cholangitis with multiple liver abscesses; 3. Sepsis; 4. Acute, fibrinous perihepatitis.

Pathological Discussion: Dr. F. P. Bornstein:

In discussing this autopsy I think we should keep a few facts in mind. We have a patient with pain with relatively low blood count, who suddenly goes into shock and dies with sudden, clinically not visible jaundice.

At autopsy the patient was jaundiced. She was rather obese. There was no fluid in the pleural cavities or pericardial sac. The chest organs were not remarkable by one fact, except that there were innumerable petechial hemorrhages all over the pleura and the pericardium. The peritoneum was smooth and glistening and there was no evidence of acute peritonitis.

The liver, as you can see, was large, swollen and rather soft. On sectioning we had extremely friable liver tissue and throughout this liver tissue there were numerous irregular abscesses (fig. 1) filled with pus of a greenish color. We got coli on the culture. The abscesses had an irregular distribution and sometimes the surrounding liver tissue was necrotic.



Figure 1

So the liver shows multiple liver abscesses and bile ducts filled with greenish, purulent material. Pressure on the gallbladder released a small amount of bile into the papilla of Vater. However, in the common bile duct there was a stone, sort of pyramid shaped, that blocked most of the common bile duct. Behind the stone there was greenish inspissated necrotic material of the same type as found in the abscesses.

The gallbladder itself had a necrotic wall. The

gallbladder and the common ductal system contained a number of small stones. The histological section of the wall of the gallbladder shows a necrotizing, gangrenous cholecystitis but no perforation as yet.

The microscopic examination of the liver showed these abscesses to be always in the neighborhood of a bile duct. The abscesses were filled with segmented granulocytes and a fibrinous exudate. The surrounding liver tissue showed areas of vacuolization and degeneration.

I think this was essentially a septic process. There was a cholecystitis but much more important, there was an ascending septic cholangitis which produced rapid destruction of liver tissue and I have to disagree with my colleagues, you can get jaundice very quickly. The acute hepatitis which kills at 48 hours can be accompanied by severe jaundice and I think if a septic process hits the liver, you can get a jaundice which is partially obstructive but partially hepatic jaundice.

I think surgery would have been totally useless because the main damage was already done by the time the patient came in. The distribution of the infectious agent through the bile ducts into the entire liver tissue and the many hemorrhages that we found in the lungs and heart in my opinion are obvious signs of sepsis.

So we have a case of sepsis starting with cholelithiasis and choledocholithiasis, biliary obstruction, infection, multiple liver abscess and total bacterial dissemination throughout the entire system. The pancreas was not particularly affected.

Dr. Francisco Licon:

In other words, if this patient had been operated, the internes would be saying you shouldn't have operated on her.

Dr. Gaddis:

Regarding the blood counts, I am reminded very much of a patient I saw on July 4, an eight-year-old girl who had been sick for five days, high fever, abdominal distention, vomiting and so forth. She was seen, incidentally, by Dr. Wilcox. Our judgment, mainly because of the blood count, was that she did not have a peritonitis. On surgery there was a perforated appendix with generalized peritonitis. She recovered. This made me realize a patient can be very seriously sick and have depression of the bone marrow response. She had a degenerative left shift rather than a regenerative. Therefore we misinterpreted the laboratory work. I have never seen it happen in a patient who didn't look sick.

Dr. Walter C. Autrey

I think there need be no recriminations. I had a similar patient 5 or 10 years older, who lived 4 days instead of 2. A surgeon saw her, surgery was declined, not operable, white counts, physical, everything just about identical. On autopsy there was a stone at the ampulla of Vater. I don't think he found any abscesses in the liver but it was obviously a stone liver death, considered nonoperable for 4 days of observation prior to death.

Dr. Kleban:

I think the white count here demonstrates that the laboratory procedures are auxillary procedures. We should make out diagnosis on the basis of our history and physical. It may be helpful, it may not be helpful, may be confusing, if we want to depend on laboratory we would have technicians make diagnosis. If we think the individual has a certain disease, whether it is a pneumonia or an acute surgical abdomen, we make that decision in spite of any white counts and I think that is simply something you have to take into account.

Dr. Bornstein:

I have two final remarks: No. 1: The house staff evaluated the disease correctly. This was a disease not amenable to surgery; secondly: you can learn that there is such a thing as catastrophic illness in the sense that a large vital organ can be knocked out by infection in an extremely short period and produce shock-like symptoms.

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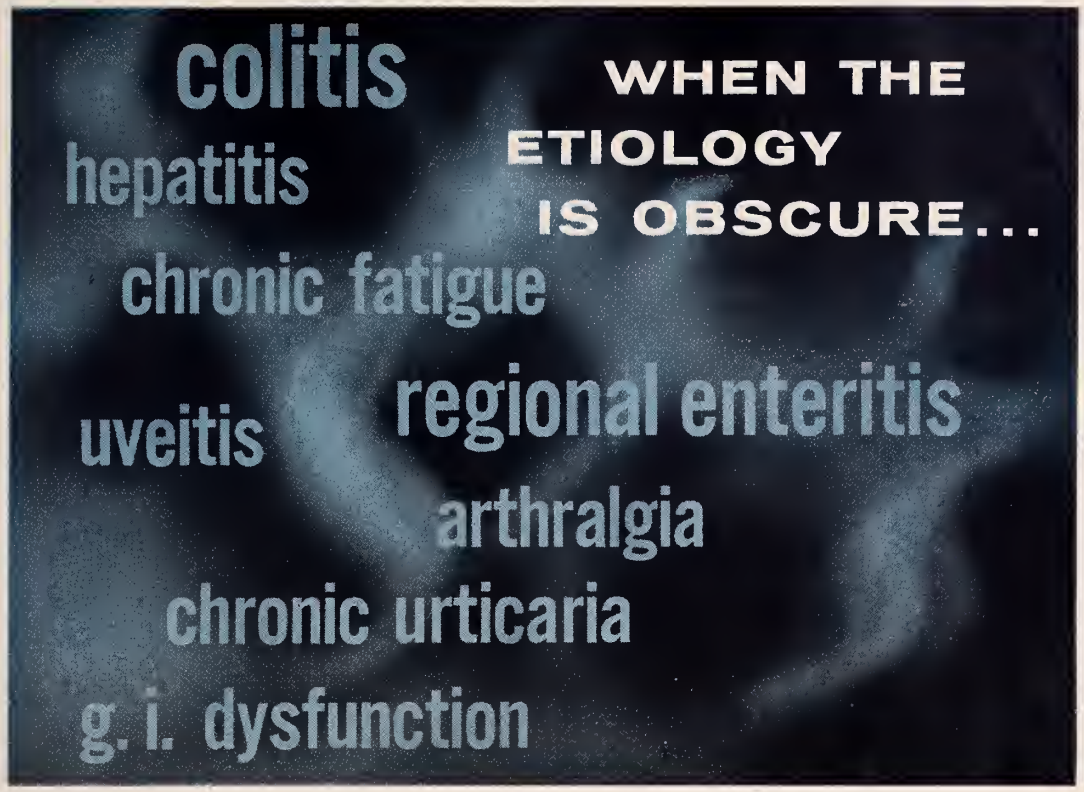
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1. Webster, B.H.: Am. Pract. and Dig. of Treat., *9*:897 (June, 1958). • 2. D'Antoni, J.S.: Am. J. Trop. Med. and Hyg., *29*:269 (May, 1949). • 3. Rinehart, R.E., and Marcus, H.: Northwest Med., *54*:708 (July, 1955). • 4. Elsdon-Dew, R.: S. Afr. Med., *32*:89 (Jan., 1958). • 5. Cook, J.E., Briggs, G.W., and Hindley, F.W.: Am. Pract. and Dig. of Treat., *6*:1821 (Dec., 1955). • 6. Farfel, B.: Am. J. of Gastroenterology, *32*:620 (Nov., 1959). • 7. Eisert, J., Hannibal, J.E., and Sanders, S.L.: New Eng. J. of Med., *261*:843 (Oct. 22, 1959). • 8. McHardy, G.C.: Gastroenterology, *30*:535 (1956). • 9. Moan, J.C.: Am. J. Trop. Med. and Hyg., *6*:499 (May, 1957). • 10. Babione, R.W., and Moan, J.C.: (to be published). • 11. Babione, R.W.: (to be published). • 12. Perkins, J.G.: U. of Oregon Med. School, Mar. 19-20, 1959.

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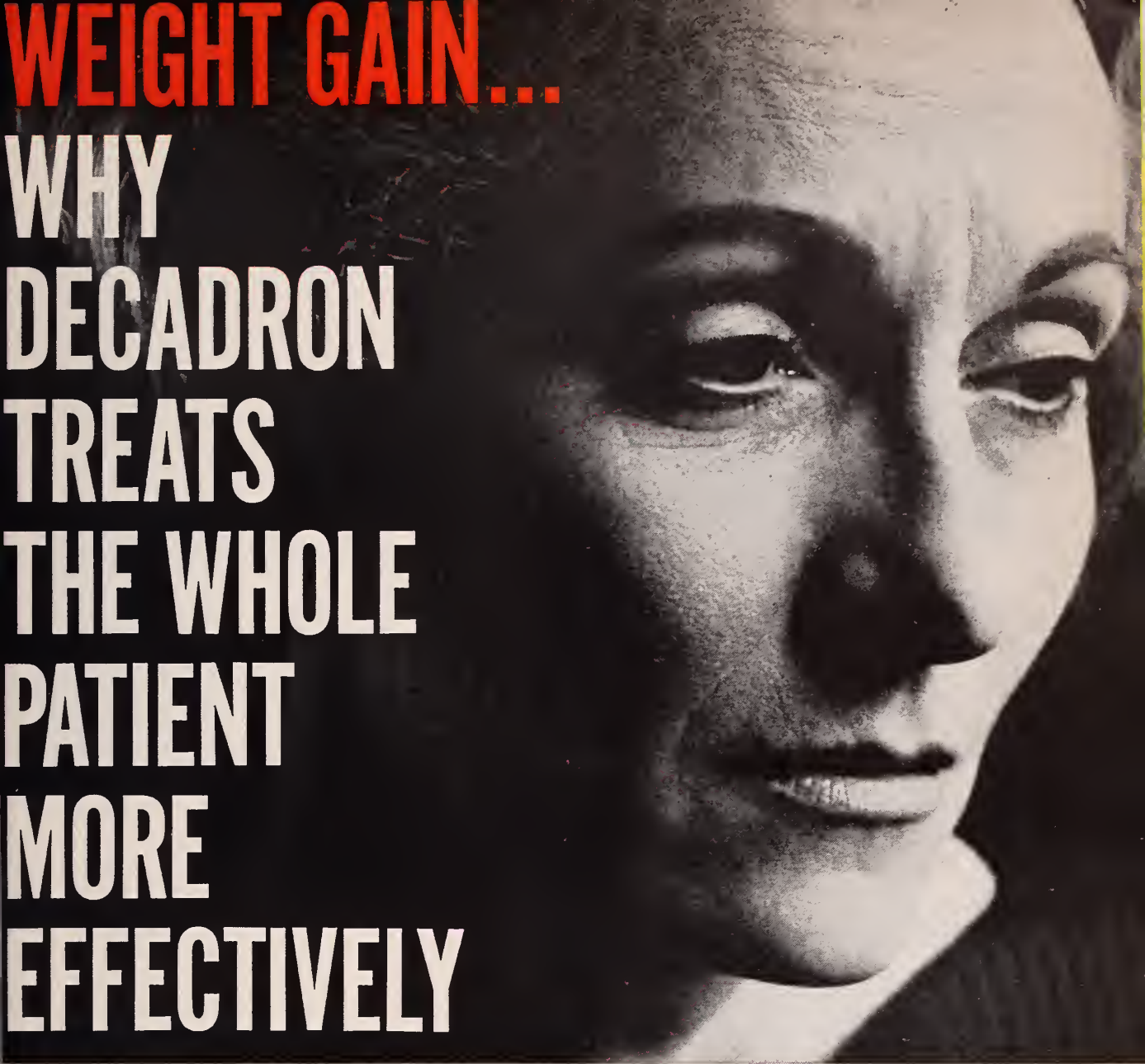
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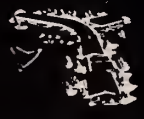
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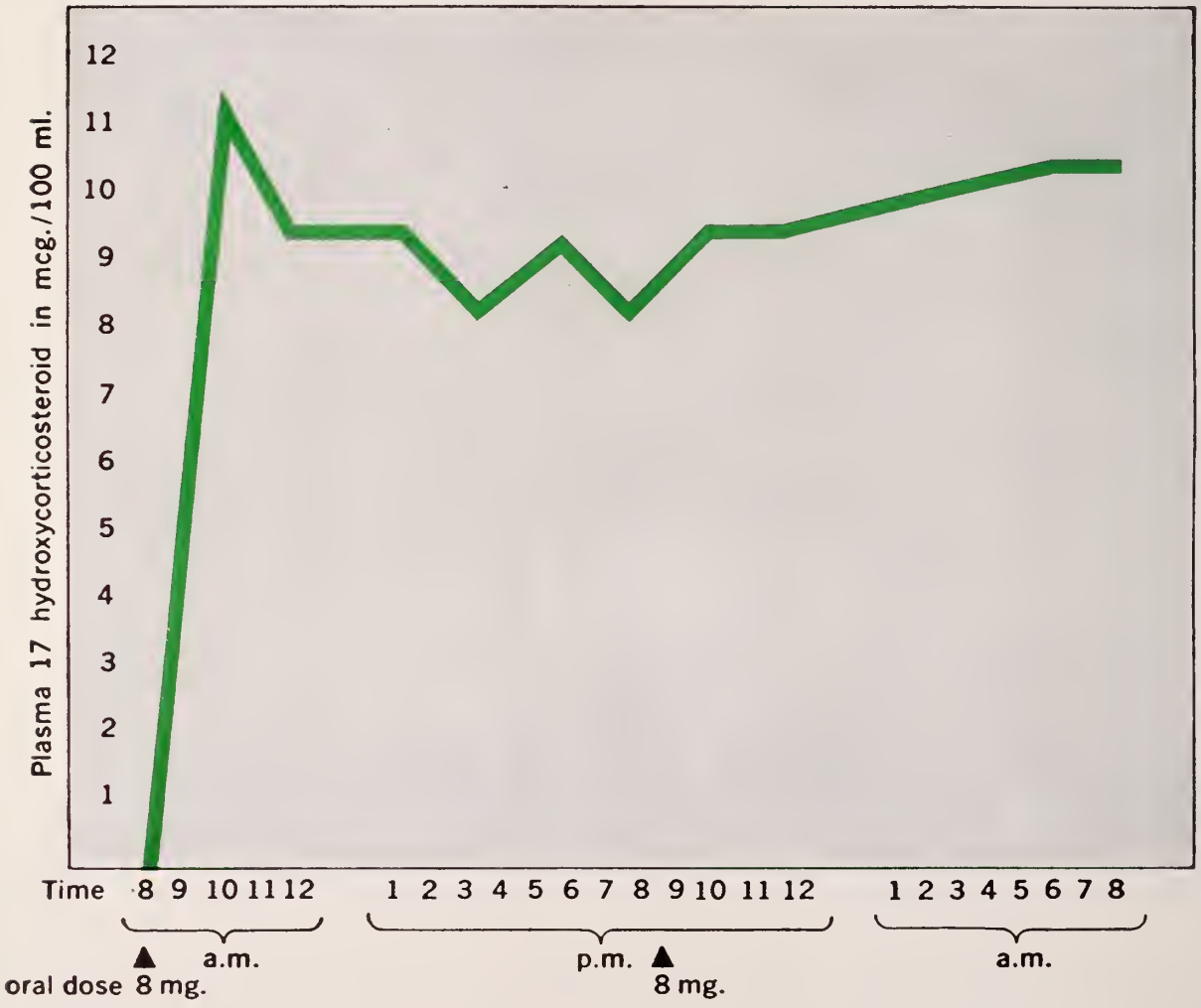
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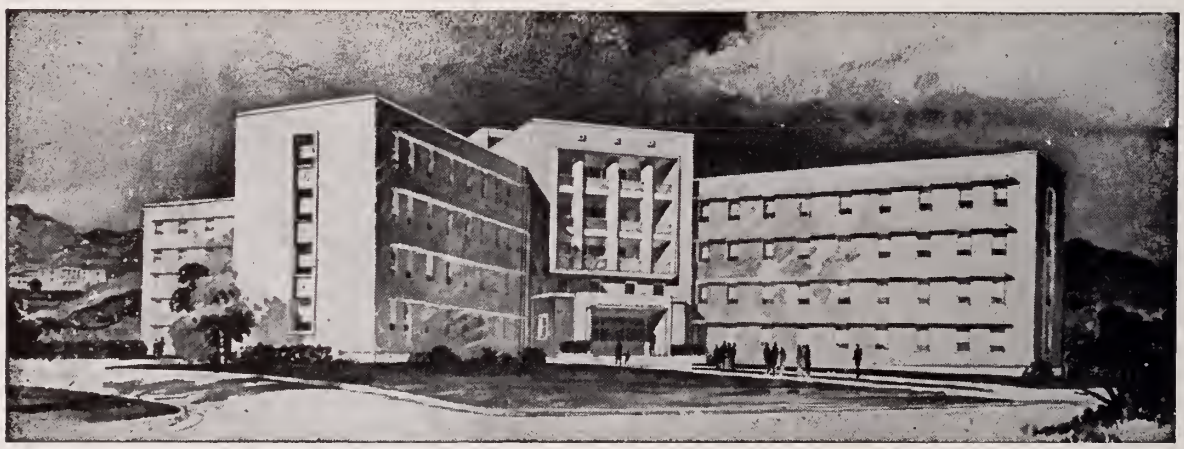
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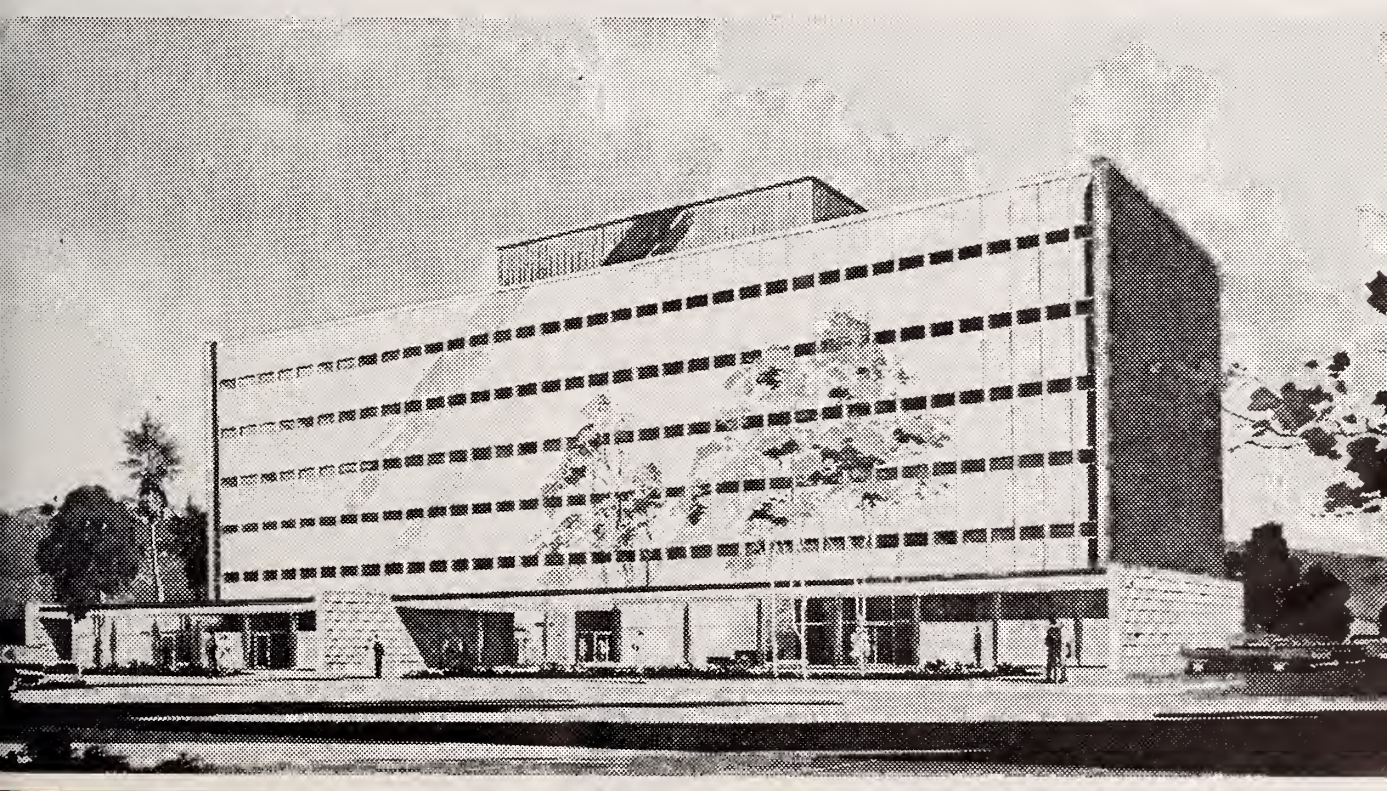
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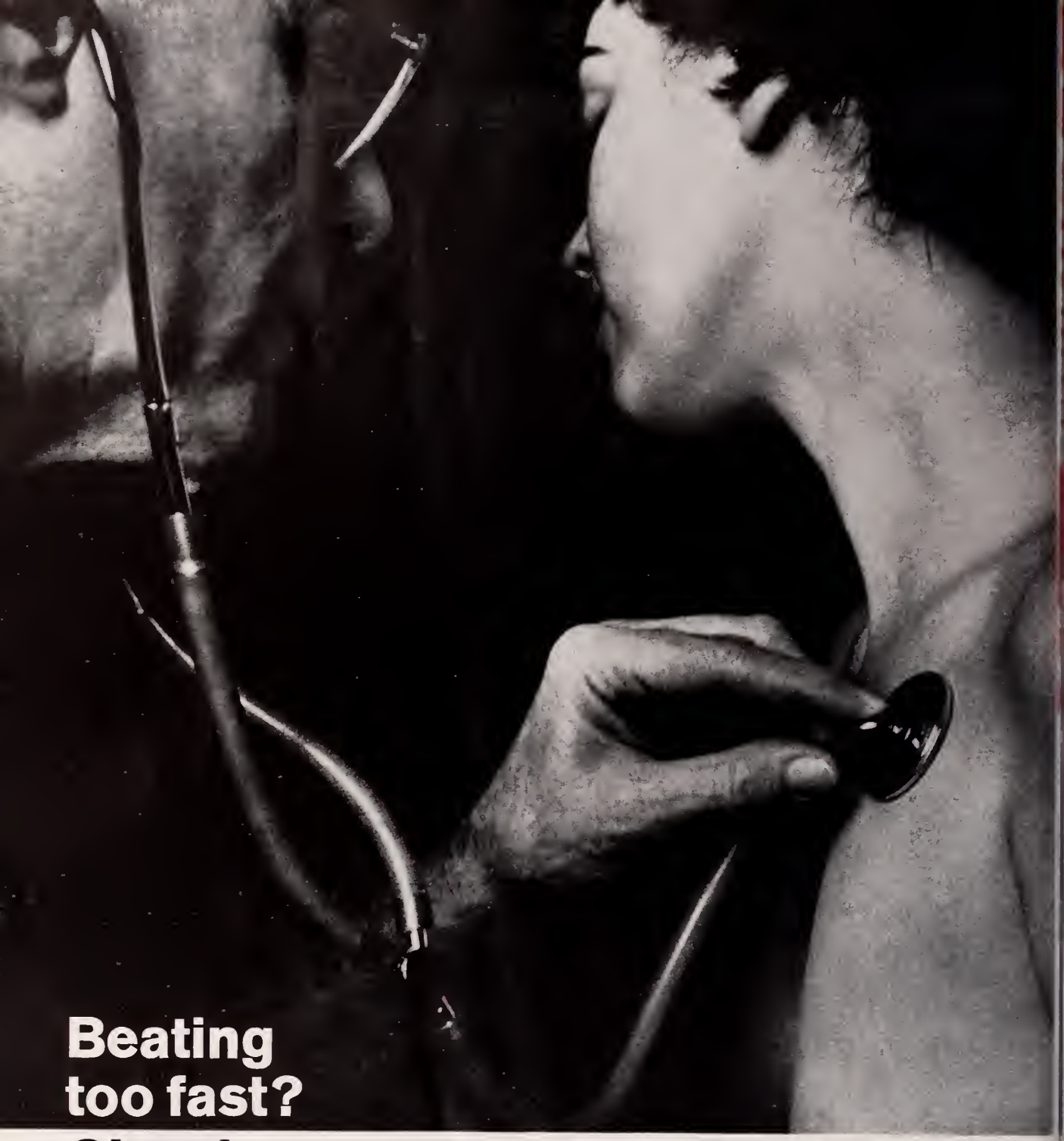
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Coming Meetings

The Society of Nuclear Medicine, Seventh Annual Meeting, Stanley Hotel, Estes Park, Colorado, June 22-25, 1960.

Postgraduate Course, Dermatology for General Practitioners, University of Colorado Medical Center, Denver, July 14-16, 1960.

Postgraduate Medical Assembly of South Texas, Shamrock Hilton, Houston, July 18-20, 1960.

New Mexico Chapter, American Academy of General Practitioners, Summer Clinic, Ruidoso, N. M., July 18-20, 1960.

Postgraduate Course in Pediatrics, University of Colorado School of Medicine, The Stanley Hotel, Estes Park, Colorado, Sept. 1-6, 1960.

Southwestern Medical Association, 42nd Annual Meeting, Hotel Hilton, El Paso, Oct. 20-22, 1960.

Southwest Obstetrical and Gynecological Society, Annual Meeting, Riviera Hotel, Las Vegas, Nev., Nov. 7-8, 1960.

Texas Orthopaedic Association, Galveston, Texas, April 24, 1961.

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1. Biegeleisen, H. I.: Clin. Med. 2:1005, 1955. 2. Roberts, J. T.: Clin. Med. 4:1375, 1957. © 1960, A.P. Co.

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1. Graham, B. S., *et al.* J.A.M.A. *166*:1586, 1958.

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CUTTER LABORATORIES
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SOUTHWESTERN MEDICINE

VOL. XLI, NO. 6 JUNE, 1960

MEETINGS

Dr. McReynolds of Houston Elected President of Texas Orthopaedic Association

Dr. I. S. McReynolds of Houston was elected president of the Texas Orthopaedic Association at its annual meeting in Fort Worth April 11, 1960, in connection with the annual convention of the Texas Medical Association. He is associate professor of orthopaedic surgery at Baylor University College of Medicine and clinical associate professor of orthopaedic surgery at the University of Texas Postgraduate School of Medicine.

Other new officers are Dr. Herbert Hipps, Waco, vice-president; and Dr. Margaret Watkins, Dallas, secretary-treasurer. The retiring president was Dr. David M. Cameron of El Paso.

Guest speakers at the annual orthopaedic meeting were Dr. Don O'Donoghue of Oklahoma City and Dr. W. H. Bickel of Rochester, Minnesota.

Resolutions Approved

Resolutions were approved in memoriam of Dr. William E. Barker, orthopaedic surgeon from Longview, who died February 5, 1960, at the age of 54; and in memoriam of Dr. Duncan C. McKeever, 53, Houston orthopaedic surgeon, who was fatally injured in an automobile accident on October 13, 1959.

The association now has 146 members and has the third largest membership of orthopaedic surgeons of any state in the nation.

The 1961 meeting is scheduled for April 24 in Galveston.

Dr. McReynolds was born in Pikeville, Tenn., and was graduated from the University of Tennessee College of Medicine in 1931. He took his internship at the U. S. Naval Hospital in New York in 1931-1932, and served for two years as junior medical officer in the Medical Corps of the U. S. Navy.

Serves Fellowship

He then served a fellowship in orthopaedic surgery at Carrell-Driver-Girard Clinic and Scottish Rite Hospital for Crippled Children, Dallas, in 1934 and 1935; and served as ortho-

Dr. McReynolds



chester Royal Infirmary in Manchester, England, from 1935 to 1936. He also served a fellowship paedic assistant to Sir Harry Platt at the Man- in orthopaedic surgery at the Willis C. Campbell Clinic, Memphis, Tenn., in 1936-1937; and spent three months in the Surgical-Pathological Department of Johns Hopkins Hospital, Baltimore, in 1937.

Dr. McReynolds entered the private practice of orthopaedic surgery in Houston in 1938. During World War II he served as a Lt. Colonel in the U. S. Army Medical Corps from 1943 to 1946.

Dr. McReynolds is a fellow of the American College of Surgeons, a past president of the Clinical Orthopaedic Society, and a member of the Houston Surgical Society, Houston Orthopaedic Society, Southern Medical Association, Southwestern Surgical Congress, Industrial Medical Association, International Society of Orthopaedic Surgery, and Traumatology (SICOT).

He and his wife have three sons; John, who is a senior at Princeton University; Bruce, age 15; and Angus, age nine. Their two daughters are Katherine, who is a freshman at Vassar College, and Heather, age six. He and his family reside at 301 Sage Road in Houston.

Dr. Cameron's Talk

The retiring president, Dr. Cameron, spoke on "Orthopaedic Surgery—an Art". His address follows:

From "Time whereof the memory of man runneth to the contrary," doctors have been admonished: "be learned in the Art and Science of your profession, and practice them." Daily the science bespeaks itself through multitudinous facts, neatly catalogued, for good or evil, requiring none but the abilities of reading and understanding to make them a part of our scientific learning. Webster defines Science shortly as "systematized knowledge of facts of the world which show the operation of general laws." But what is the Art? That which Hippocrates, 25 hundred years ago pledged to teach "by precept, oral teaching and every other mode of instruction." Again a Websterian definition—"Skill in performance, acquired by experience, study or observation"—This is the art in its most abbreviated form.

Philosopher's Approach

The philosopher's approach to the art helps explain this difficult to define attribute. He considers it to be a conscious activity which does three things: 1st—It manipulates or arranges natural materials, 2nd—It has purpose, and 3rd—The result thereof is regarded as an end which justifies its own existence. Here "Art" has traditionally been contrasted with "Nature." For example, as beautiful as a sunset may be it is not considered art; it is a natural phenomenon.

However, the skilled reproduction of it on canvas is art, fulfilling the philosophical criteria of 1) arrangement of natural material, 2) purposive and finally 3) the results justify its own existence. The philosopher further interprets the art as an intensified expression of experiences (or science). Here the doctor contributes his personality, knowledge, memory and imagination to mold environment, adds to it, and supplies the stuff of which the culture of a people is made.

Welfare and Happiness

Furthermore, there is a general enhancement of welfare and happiness with objective realization and subjective reaction. Thus are the learned definitions of the Art. Those who have practiced medicine, and love it, know there must be a warmer description. And indeed there is; words alone are inadequate, but they must be used.—personality, humility, reverence, honor, responsibility, curiosity, maturity. Of personality. Without patients the most brilliant scientist will go for naught. Annually training centers belch forth thousands of brilliant scientists into the medical world. Until they can become personable enough to be known, to be convincing to be human, or in other words sell themselves and their knowledge, they are not doctors. These are the traits of the medicine man with his medicine show of yesteryear. Indeed an art, however ours is based on a firm foundation of scientific fact and learning.

Traditional Dignity

Few will be medical politicians but all of us daily represent our profession to the public. Our conduct with traditional dignity, honor, humility and responsibility does more to retain our enviable place of respect among men and it is more forceful than any laws that legislators can impose. With Humility comes Reverence. Never was a doctor more confident of his knowledge than the day of his graduation. With passage of time and putting facts to the test, his learning becomes related to experience. Under certain circumstances two plus two produces five, as well as four. And the realization there is a power "greater than thou", referred to variously as "Mother Nature", "natural forces," or God. With humility comes wisdom. The wise doctor knows he learns but the rules of healing, abides by them, and this force "greater than thou" does the healing. He



ORTHOPAEDIC SPEAKER — Dr. Don O'Donoghue of Oklahoma City, left, who spoke at the annual session of the Texas Orthopaedic Association at Fort Worth April 11, 1960, is shown in a relaxing moment with Dr. C. F. Gregory of Dallas.

who learns this fact early has many years of service since times does not come free.

Likewise honor and responsibility are related one unto the other. Impetuous youth rapidly develops a sense of obligation as to the conduct befitting a respected professional man and becomes accountable for things as well as patients under his management and care; furthermore discharging community responsibilities and honorably understanding the value of and respect for human dignity which is the common denominator of us all.

Curiosity implies not only the desire to learn and know about the present and the future, but also to know about our medical forebearers and place them in proper chronological order, realizing the value of their pioneering achievements and thanking God for their perseverence. By studying their works and times, none but the greatest respect develops for them and our profession. Our own rapidly changing field has produced men of wisdom and courage. He who scoffs or decries the doctor of the past for being "old fashioned" shows but his own shortsightedness, bad manners and mental immaturity. Surely, had it not been for our forebearers, how could we possibly be at our present state of knowledge? Only by standing on their strong broad shoulders can our present scientific efforts be justified. They cannot be repaid but we can repay the profession by contributing our best, and making broader and stronger foundations for our successors to stand upon so they can reach greater heights



FORT WORTH HALTER — Dr. W. H. Bickel of Mayo Clinic, guest speaker at the annual meeting of the Texas Orthopaedic Association in Fort Worth April 11, 1960, examines a halter purchased in Fort Worth as members of the association return from a luncheon at the Cattleman's Steak House for scientific session in the afternoon. On the left is Dr. R. A. Murray, Temple, and Dr. Cecil A. Robinson of Kermit is in the center background.



ORTHOPAEDIC OFFICIALS — Dr. David M. Cameron, left, immediate past-president of the Texas Orthopaedic Association, and Dr. Rex J. Howard, Fort Worth, chairman for the Fort Worth meeting, beam enthusiasm at the success of the one day session held in conjunction with the annual meeting of the Texas Medical Association.

of achievements. Then we must act as the "loyal opposition", requiring proof. May none of us have such brittle habits that new truths cannot be accepted.

Respected Repository

"All the world's a stage . . . and one man in his time plays many parts."[2] Today the striving seeker of knowledge; tomorrow the respected repository of recorded facts, who as did Solon, grew "old ever learning many things."[3] Ever a changing panorama—of this is the art composed. "What's past is prologue."[4]

The art is not a passive thing, it is animate, requiring nurturing. With maturation truths are weighed in the scale of knowledge to arrive at a wise solution. Here the key word is **Wise,** this means tact, compassion, retention and recall, interpretation of signs, symptoms and previous experiences, being "—not the first by whom the new are tried—nor yet the last to lay the old aside."[5] Boundless are the joys that come with the **savoir-faire** of the Art. Serenity as learning becomes knowledge; as kindness, consideration and tolerance becomes intimately fused with daily habit patterns. Equanimity with its ever increasing wisdom and truth is passed on to others with loving kindness, fulfilling Christ's teaching as recorded by Luke, —"For unto whomsoever much is given of him shall be much required."[6] I know not how the practice of medicine could become a commercial product whose services could be sold on the open market strictly for gain. Those who try soon loose a commodity to sell. Unless the heart goes with the service the patient does not get full value received. "A good doctor must be a good man."[7]

Prayer of Learned Man

In closing I quote a prayer of a learned man that to me expresses the ultimate in Scientific Art.

"From the irresponsibility that casts aside all old truth in search of nothing better than novelty; from the cowardice that shrinks from all new truth; from the lethargy that rests content with partial truths; and from the arrogance that lays claim to total truth; Oh God of truth, deliver us.—Amen."[8]

Bibliography

1. Blackstone, William: Commentaries on the Laws of England.
2. Shakespeare, William: As You Like It.
3. Solon: **Poetae Lyrici Graeci.**
4. Shakespeare, William: The Tempest.
5. Pope, Alexander: An Essay on Criticism.
6. Luke: Bible 12:48
7. Taylor, Rev. E. L. M.: Quoting Herman Nothnagel, Canad. Med. Assn. Journ. 119-122, June 15, 1959.
8. McCrady, Edward: (Vice Chancellor, Univ. of the South) Personal Communication.

Future Doctors Clubs Formed in Albuquerque High Schools

An Albuquerque physician, Dr. E. H. Wood, has organized "Future Doctors Clubs" in several of the Albuquerque high schools. Anyone interested in obtaining information on starting such a club may write Dr. E. H. Wood at 4800 Gibson Blvd., SE, Albuquerque.

New Mexico General Practitioners to Hold Summer Clinic in Ruidoso

The annual summer clinics sponsored by the New Mexico Academy of General Practice will be held in Ruidoso July 18-21. A faculty from the University of Kansas Medical School will present the program. Scientific sessions will be held each morning in Nob Hill Auditorium, with remainder of the day free. The complete scientific program follows:

Monday, July 18
Heart Disease

9:00- 9:30 Clinical Manifestations of Arrhythmias
James E. Crockett, M.D.

9:30-10:00 Heart Disease in Pregnancy
Kermit Krantz, M.D.

10:00-10:30 Difficulties in the Diagnosis of Rheumatic Fever
Franklin C. Behrle, M.D.

10:30-10:50 Coffee

10:50-12:00 Panel Discussion
Drs. Crockett, Krantz, and Behrle
Moderator: Mahlon H. Delp, M.D.
Heart Disease and Air Travel
Anticoagulants
Diets in Heart Disease
Smoking and Heart Disease
Prevention of Rheumatic Fever
Drugs in Hypertension

12:15 Luncheon and business meeting

Tuesday, July 19
Mother and Child

9:00- 9:30 Jaundice in the Newborn
Franklin C. Behrle, M.D.

9:30-10:00 Forceps and Neonatal Salvage
Kermit Krantz, M.D.

10:00-10:30 Common Congenital Heart Disease
James E. Crockett, M.D.

10:30-11:00 Infectious Hepatitis in Pregnancy
Mahlon H. Delp, M.D.

11:00-11:20 Coffee

11:20-12:00 Panel Discussion
Drs. Crockett, Krantz, and Behrle
Moderator: Dr. Delp
Transplacental Disease
Dangers of the First Trimester
Toxemias of Pregnancy
Immunizations
Poisonings in Children
Cryptic Virus Infections (ECHO)

12:15 Luncheon
Question period to follow

Wednesday, July 20
Cancer

9:00- 9:30 The Physician's Responsibility in the Surgical Treatment of Cancer
Frank F. Allbritten, Jr., M.D.

9:30-10:00 I-131 in the Diagnosis of Carcinoma of the Thyroid
Donald R. Germann, M.D.

10:00-10:30 Chemotherapy of Cancer for the Family Physician
John F. Christianson, M.D.

10:30-10:50 Coffee

10:50-12:00 Panel Discussion
Drs. Allbritten, Germann and Christianson
Moderator: Dr. Delp
Easily Missed Cancer
New Diagnostic Techniques for Cancer
Hyphophysectomy, Adrenalectomy, Oophorectomy
Dangerous Pigmentations
Cigarettes and Cancer
Pain Relief in Cancer

12:15 Luncheon
Question period to follow

Thursday, July 21
Emergencies

9:00- 9:30 Postoperative Medical Emergencies
John F. Christianson, M.D.

9:30-10:00 The Use of X-Ray in the Evaluation of the Emergency Patient
Donald R. Germann, M.D.

10:00-10:30 The Immediate Care of the Injured Patient
Frank F. Allbritten, Jr., M.D.

10:30-11:00 Hepatic Coma
Mahlon H. Delp, M.D.

11:00-11:30 Coffee

11:30-12:30 Panel Discussion
Drs. Allbritten, Germann, and Christianson
Moderator: Dr. Delp
Acute Anuria
Technique of Tracheostomy
Common Causes of Coma
Anaphalactoid Reactions to Medication
Management of Convulsions
Upper Gastrointestinal Bleeding

These presentations are made possible by a grant from the Merck, Sharp & Dohme Postgraduate Program.

Santa Fe Seminar

St. Vincent's Hospital, Santa Fe
February 22, 1960
Harry D. Ellis, M.D., Chairman

Eclampsia and Preeclampsia

Case Summaries: Fred Soldow, M.D.

Seminar Summary: Raymond L. Young, M.D.

On 3/10/55, at 2 a.m., this 20-year-old white woman, primigravida, was brought to the emergency room of St. Vincent's Hospital complaining of swelling of the face and extremities and severe occipital headache. The headache began three days previously. There had been no prenatal care. The expected date of confinement was 4/14/55.

Examination revealed a blood pressure of 160/95, marked eyeground vasospasm, and hyperactive tendon reflexes. The fetal heart rate was 145 B.P.M.

The past medical history was uninforming. There was no known history of prior renal disease.

Shortly after examination, the patient began to convulse. This was relieved by the intravenous administration of one gram of magnesium sulfate.

The patient was then taken to a hospital room and placed on a regimen of complete rest, sedation, periodic intramuscular magnesium sulfate, and ammonium chloride by mouth. During the next eight hours very little urine was obtained but in the succeeding several hours the urine output increased noticeably.

Second Seizure

About 14 hours after admission a second convulsive seizure occurred. This terminated shortly after the intramuscular administration of five grams of magnesium sulfate.

In the next 24 hours, no further convulsions occurred and the urine showed decreasing albuminuria. The patient's general condition was improved and on 3/12/55, labor was induced. A viable two lb. 13 oz. infant was delivered from below. The baby survived. The mother improved steadily following delivery and was discharged in fairly good condition 3/18/55.

Follow-up note: On 3/3/57, the patient was delivered of a second premature infant which survived. There was no evidence of toxemia during or immediately after this pregnancy.

Case No. 2

This 35-year-old, gravida XII, was hospitalized at St. Vincent's Hospital 9/16/59, complaining of epigastric pain. This appeared to follow ingestion of green chile. The pain radiated through to the back. The patient stated that she was eight months pregnant and that she had had no prenatal care.

The past medical history revealed three previous hospitalizations for delivery and during these hospitalizations there was no significant evidence of toxemia. The last delivery was July, 1958, at which time Kahn and VDRL tests were reactive, 64 Kahn units and 16 VDRL dils. being reported. Penicillin therapy was given shortly thereafter.

The patient's temperature on admission was 98.6° and the pulse rate was 60. Following admission the epigastric pain persisted and increased in severity. This was not relieved by antiacid therapy and the administration of Demerol, 100mgms.

A urine specimen was obtained and found to have a dark brown color and analysis of the urine revealed: 1.3 grams hemoglobin/100 ml.; a few RBC/hpf; albumin four plus. The VDRL test was reactive, 2 dils.

Blood Pressure

The blood pressure on admission was 180/130. There was little evidence of peripheral edema, but the eyeground vessels showed marked vasospasm. In addition to demerol, the patient was given Seconal, gr. 1½ and Thorazine, 25 mgm. Later during the day of admission, the patient's epigastric pain subsided and she became drowsy. Her blood pressure remained elevated.

During the night following the day of admission, Magnesium Sulfate was administered intramuscularly at intervals and mild barbiturate sedation was given. The blood pressure remained elevated and the patient remained drowsy.

At about 4 a.m. labor contractions were noted

at 5 to 10 min. intervals, lasting for 30 seconds. At 6:30 a.m. the blood pressure was 160/120 and at 8 a.m. the blood pressure had risen to 190/140. At this time fetal heart tones became faint.

Muscular Stiffness

One thousand ml. of five per cent glucose in water containing 0.5 mgm. of Diuril were started. Magnesium Sulphate (6cc of 50 per cent sol.) was given. The patient's general condition appeared to be deteriorating, and muscular stiffness was observed.

By 9 a.m. the blood pressure had fallen to 140/120. The urine obtained was still dark in color and it gave a four plus reaction for albumin.

About 10 a.m. Apresoline was given. By 11 a.m. the patient was deeply comatose and nuchal rigidity was marked. The blood pressure was now 110/0. Levophed was added to the intravenous of five per cent Glucose solution.

There was no improvement in the patient's condition over the next few hours and she expired at 4:25 p.m. A postmortem Cesarean Section was done and a nonviable fetus was delivered. Permission for postmortem examination was obtained.

Postmortem diagnoses:

1) Massive Intracerebral Hemorrhage.
2) Periportal and Pericentral Necrosis of the Liver
3) Acute Glomerulitis
4) Pulmonary Edema.

Differential Diagnosis: Dr. Margery Whipple:

Eastman's definition of this condition is "An acute disease peculiar to gravid and puerperal women which is characterized by convulsions during which there is a loss of consciousness followed by more or less prolonged coma."

Certainly this is a proper definition and the convulsions are arresting and grave signs. We must, however, consider preeclampsia and eclampsia as the same complex with the convulsions of eclampsia being indicative of progression of the disease. The triad of hypertension, proteinuria and edema occurring in the third trimester of pregnancy or the immediate puerperal period constitute the classical signs of preeclampsia. With progression to convulsions, the status becomes that of eclampsia.

As far as past history is concerned in true preeclampsia or eclampsia there is no renal or hypertensive history. The patients are often young primigravidae but may be any age or parity.

Clinical symptoms noted by these patients are a severe headache of increasing degree, spots before the eyes, double vision, sudden blindness, swelling, especially of the hands and face, rapid weight gain, nausea, vomiting and epigastric pain. The last symptom is often serious in that it may precede a convulsion. This pain in the epigastrum may be central in origin as the pain of tabetic crisis or it may be due to distention of the liver capsule. Langmade has emphasized that it may also be due to esophageal erosion or gastric or duodenal ulcer.

Arterial Hypertension

Physical examination of the patient will show arterial hypertension, by definition above a systolic of 140 mm and/or above a diastolic of 90 mm. Values lower than this should not be ignored if the patient's known normal tension is below the observed values.

Edema, especially of the hands and face, and of the sacral area in a bed patient, is important but perhaps not essential to the diagnosis. Proteinuria is almost always present.

Ophthalmoscopic examination shows changes in the caliber of the retinal vessels with narrowing of the arteries and engorgement of the veins. Additional retinal changes are retinal edema with an increase in light reflex and in some patients flame shaped hemorrhages. Retinal detachment occurs rarely.

The reflexes of the body are usually hyperactive.

In severe eclampsia the patient will often become comatose, demonstrate an elevation in body temperature, pulse and respiration rate, and rather frequently develop pulmonary edema. Oliguria or anuria are common in this stage of the disease.

Proteinuria varies from a trace to a four plus reaction. Erythrocytes may be present from a small number to a sufficient number to cause gross hematuria. Hemoglobin may be present and hyaline and granular casts may be present.

Blood Urea Nitrogen Elevated

The blood urea nitrogen will be elevated in severe cases. The blood uric acid is believed by some to show an earlier rise and the elevation is said to indicate a severe true preeclampsia. Serum albumin and CO_2 combining power may be decreased.

Important in confirming the diagnosis of true preeclampsia or eclampsia is the disappearance within a short time after delivery of hypertension, proteinuria, and edema.

The differential diagnosis is important from a prognostic viewpoint. Essential or renal hypertension (either condition with or without superimposed toxemia) are the main problems in differential diagnosis.

The diagnosis of essential hypertension can be made from the history if its presence is found on examination before 20 weeks gestation. In essential hypertension levels of blood urea, uric acid, and creatinine are infrequently elevated. Essential or renal hypertension occurs more commonly in older multiparae. The presence of renal disease may be known from the previous history.

In recent years the differential diagnosis has been aided considerably by the use of renal biopsy. These were first taken transperitoneally at the time of Cesarean sections and later on a much wider scale by the peri-cutaneous method.

Renal Biopsies

Dieckmann, McCartney, and Harrod at the University of Chicago have reported 145 renal biopsies from pregnant patients. These usually served to differentiate true eclampsia and pre-eclampsia from that superimposed upon pre-existing renal disease. They were able to distinguish five renal conditions exclusive of the typical toxemic lesions of eclampsia and preeclampsia. The follow-up biopsy studies on their patients having true eclampsia revealed a return to normal histologic renal anatomy.

Spargo, McCartney and Winemiller of Chicago have reported cases in which the renal biopsies were studied with the electron microscope. They describe the lesion as "glomerular capillary endotheliosis". They have an eleven-day biopsy which showed some clearing and a return to normal in a follow-up four-weeks old biopsy of the same patient.

Occasionally one is confronted with a case in late pregnancy or immediate puerperium with convulsions and/or coma and no prior knowledge of the case is available.

Dieckman points out, in such a case, that there is nothing characteristic about the convulsions of eclampsia and other conditions such as epilepsy, hypertensive encephalopathy, uremia, hypoglycemia, and meningitis should be considered.

Etiology: Dr. Charlotte Jones:

The etiology of the specific toxemia of pregnancy, namely, the eclamptic syndrome—is unknown. The disease has been studied over the entire world for many years by many investigators, and it is only in recent years that plausible theories have come to light. The present concepts may be roughly grouped into three main theoretical categories: placental ischemia and necrosis, specific toxins, and generalized endocrine imbalance.

The concept of uterine ischemia and necrosis dates back as far as 1914 when it was first considered by James Young. Of late it has occupied the concentrated attention of Jeffcoate, Scott and Browne in London, as well as that of Venner, Bartholomew and others in this country.

These workers feel that increased intrauterine pressure, or possibly some other factor, creates a circulatory change which produces what they term a utero-renal reflex. This reflex acts adversely on the kidney with the result that renal symptoms occur which are typical of the disease entity. Sophian demonstrated this reflex experimentally, and English investigators have evaluated degrees of increased myometrial tonus through the use of radioactive isotopes. From the combined observations it is felt that excessive myometrial tonus through the reduction of the blood supply to the uterus, produces the utero-renal reflex. This reflex, in turn, causes variable vasoconstriction within the kidney and subsequent renal ischemia. As a result splanchnic vaso-constriction occurs producing further impairment of uterine circulation, which inevitably leads to placental ischemia and necrosis.

Placental necrosis is considered pathognomic for this disease. Part of the circulatory aberration in the placenta is centered around the abnormal spasm of the venous sphincters of the placental veins. This, through diminution and obliteration of intervillous spaces results in necrosis of the chorionic epithelium, villus stroma and capillary endothelium. It is felt that the first product of placental necrosis is thromboplastin, but there is suggestive evidence indicating that necrotic areas may well be the source of other unknown endotoxins which enter the maternal blood stream.

Trigger Factor

This brings us to the so-called "trigger" factor exciting the venous spasm. This factor is considered by many to be a direct result of endocrine imbalance. F. J. Browne has written concerning the similarity of the eclamptic state to Cushing's syndrome, and feels that there must be a pressor substance involved that is produced in excess. He has postulated that there is an oxygen sensitive oxidase produced that inactivates the pressor hormones from the adrenal cortex. It is his contension that in the presence of an ischemic placenta one finds lowered oxygen tension and therefore the protective enzyme is made ineffective, and hypertension and other signs and symptoms of toxemia are the result.

Other investigators stress the deliterious results of a change in placental hormones occurring with placental ischemia and necrosis, for example, there is an increase instead of decrease in gona-

dotropic gonadotropin and a **decrease** instead of an increase in the secretion of estrogen and progesterone. These workers also maintain that there is excessive hypertrophy of the adrenal cortex in the eclamptic syndrome, and attempt to correlate the resultant increase in corticosteroids and mineral-corticoids with the co-existent sodium retention and hypertension.

I would also like to add that some people have stressed the importance of a psychosomatic background of patients developing preeclampsia and eclampsia. It has also been suggested, but never proven, that the preeclamptic and eclamptic states are correlaries of the Schwartzman phenomena produced in animals.

For as many adherents to the various theories, there are as many opponents, and much more investigation is necessary before we can state clearly the etiology of the eclamptic syndrome, still among the three most common causes of maternal death.

Question: Dr. Howard Seitz:

Dr. Jones, does this problem occur in dogs?

Dr. Jones:

There is a syndrome in pregnant bitches similar to the eclamptic syndrome in the pregnant human, but it appears to last only a few days, and has been demonstrated as being related to hypocalcemia. This is very easily taken care of by the intravenous administration of calcium. The experimental production of eclampsia in animals has been difficult, perhaps because of the difficulty of producing hypertension in pregnant animals. I understand that Assali has produced eclampsia in pregnant sheep.

Pathology: Dr. Harry Ellis:

The pathology of eclampsia is seen mainly in the liver, brain, and kidneys. There are less striking, but perhaps equally important changes, in the uterus and placenta.

The characteristic change in the liver is that of periportal necrosis. Sometimes the necroses extend into the central areas and infrequently the liver necroses become massive. Subcapsular hepatic hemorrhages and intraparenchymal hemorrhages are common.

I should mention that the liver is not a constant site of anatomical change in this condition. Reports vary from a 50 per cent to a 75 per cent incidence. The liver necroses are reported to occur more frequently in patients dying within two days of the onset of the disease as compared to those who die later.

In the kidneys, the common changes occur in the glomeruli and consist of swelling of the glomeruli and partial to complete obliteration of the glomerular capillary spaces. Precipitated protein, often accompanied by red blood cells, is seen in the glomerular spaces. The second case demonstrated the presence of numerous red blood cells not only in the glomerular spaces but in the tubules as well. I would like to show the renal glomerular capillary in eclampsia in a

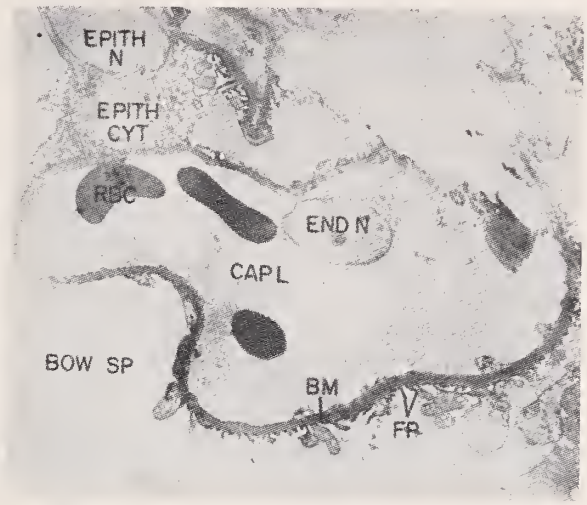


Figure 1. Cross section of a normal glomerular capillary, showing the widely patent capillary lumen and scanty endothelial cell cytoplasm. X 5,000. (Courtesy of Benjamin Spargo, M.D., Chicago.)

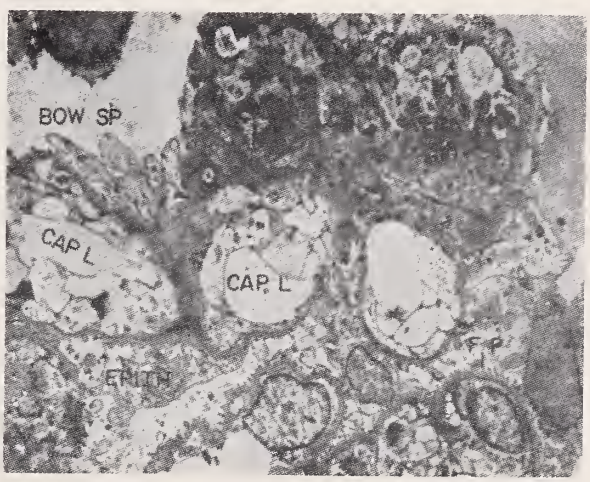


Figure 2. A typical ischemic glomerular lobule from a case of preeclampsia. There is marked narrowing of the capillary lumen by the cytoplasm of the endothelial cell. It is clear that the basement membrane is intact and the epithelial change is slight. X 4,500. (Courtesy of Benjamin Spargo, M.D., Chicago.)

section magnified by electron microscopy. Figure 1 shows a normal renal glomerular capillary. The endothelial cell cytoplasm is quite sparse. Figure 2 shows a glomerular capillary loop endothelial cells from a case of eclampsia. Here you see the marked swelling with almost occlusion of the loop lumen by the increased endothelial cell cytoplasm.

Less commonly there develops lower nephron nephrosis. This is said to occur in about one-third of fatal cases of eclampsia. Even more infrequently the kidneys demonstrate bilateral cortical necrosis.

The brain frequently contains numerous petechiae. Gross cerebral hemorrhage occurs and in one series was responsible for death in 47 per cent of fatal cases. The presence or absence of cerebral edema appears to be a matter of some controversy.

The placenta in eclampsia contains more and larger infarcts than normal controls. Zones of necrosis and hemorrhage of the decidua basalis are usually present and there is often associated fibrinoid degeneration and thrombosis of the endometrial spiral arterioles.

There is often an excess of syncytial knots attached to the chorionic villi.

The uterus will usually demonstrate foci of hemorrhage in the myometrium of subserosal connective tissue.

Petechiae are frequently noted in the myocardium and not infrequently elsewhere. Tiny focal areas of myocardial necrosis are reported.

Another pathologic change of interest has been the finding in organs and tissues of the greater circulation, especially the liver, of fibrin thrombi within capillaries and smaller vessels. This has been a variable observation and has not been adequately explained.

Treatment: Dr. Robert Snow:

The attention given to early incipient signs of preeclampsia is probably one of the few really practical developments in the management of toxemia of pregnancy. The best and most effective treatment of eclampsia is prevention by means of adequate prenatal care. Illustrative of the improved results that may be cited are collective studies from New Zealand. There eclamptic deaths have decreased from ninety-three in a period from 1928 to 1933 to one in 1955. Adequate care includes the necessity of regular frequent blood pressure determinations, weighing and examination of the urine for albumin.

Convulsions may occur during the course of a seemingly mild toxemia but are more likely in the severe grades. Most cases occur before or during labor. An eclamptic is an individual whose condition is poor and who is not a good operative risk. The condition demonstrates a tendency to improvement, a tendency particularly to be encouraged by supportive treatment. There is danger from overtreatment especially in too vigorous attempts to rapidly terminate pregnancy. The initial treatment of eclampsia is not concerned with the question of obstetric interference but is a matter of determining the particular form of conservative therapy to be employed.

Absolute rest in bed with a minimum of disturbing procedures is essential. In addition to rest, isolation a darkened room and side rails help to minimize patient stimulation. The blood pressure cuff may be left on. An indwelling catheter is valuable to obtain measurements of urinary output and quantitative determinations of albumin. The following laboratory procedures may be considered: typing and crossmatching, uric acid, npn, serum albumin and CO_2 combining power. These are part of an assessment of the patient's condition.

Danger of Aspiration

Fluids are never given by mouth unless the patient is conscious because of the danger of aspiration. Water and electrolyte disturbances should be corrected. When this is accomplished the fluids intake is usually maintained at 2500-3000 cc depending on the urinary output. Dextrose solutions help to increase the urinary output and supply caloric needs. The salt intake should approximate 1½-2 grams daily. To displace accumulated sodium ion, when the urinary output is adequate and the patient is not in acidosis, ammonium chloride (4 grams three times daily for two days) can be given. Oxygen may be administered during and for 10 minutes after a convulsion.

Magnesium sulfate is the most potent anticonvulsive agent. Parenteral magnesium ion depresses nervous excitability at the neuro-muscular junction in a manner similar to that of curare. It is safe to give 10 grams intramuscularly as an initial dose followed by 5 grams every six hours. Where a more rapid action is desired 1-2 grams may be given intravenously. Precautions are as follows: knee jerks should be tested before each injection. Respirations should be 16 or more per minute. The drug should probably not be continued for more than 24 hours if the urinary output is less than 600 ml. daily. Intravenous calcium gluconate is an immediate antidote.

A good guide to the need for sedation is the presence of hyperactive reflexes. Sedation helps to allay and prevent convulsions. Barbiturates are usually employed and may be given parenterally at first.

The fundamental pathophysiologic phenomena underlying acute toxemia is a generalized arteriolar vasoconstriction with an increase in vascular resistance particularly in the kidneys, liver, brain, and uterus. The use of vasodepressors has not gained uniform adoption but as used by their advocates the aim is to restore the caliber of constricted arterioles to a normal or nearly normal diameter. The route of administration depends on the urgency. Assali recommends Apresoline 30-40 milligrams intravenously to be repeated as often as necessary to keep the blood pressure at 20-25 per cent below control values or as Bryant states at the value existing before or early in pregnancy. The blood pressure is used principally as the means by which therapy is guided. If the blood pressure tends to return toward control values Veratrum or one of the slower acting Rauwolfia preparations may be added to the regimen. Various combinations are employed to obtain the best results and to lessen unpleasant and toxic effects. The veratrum preparations usually recommended are mixtures of protoveratrines A and B. They have less tendency to produce nausea than preparations of the crude drug. The occurrence of cardiac irregularities such as pulsus alternans, gallop rhythm or skipped beats is an indication for stopping the use of veratrum derivatives.

Digitalization is recommended in the presence of cardiac failure or pulmonary edema.

With no convulsions or coma for 48 hours the considerations for delivery correspond to those for a very severe preeclamptic. Delivery when maximum improvement has occurred is preferably solved vaginally with induction of labor by rupture of membranes or with intravenous Pitocin or Syntocinon. Cesarean section is reserved for other obstetric complications or in instances resistant to or unfavorable for induction.

Magnesium Sulfate: Dr. Willis Pickel:

Magnesium Sulfate has been used for many years in the treatment of preeclampsia and eclampsia because of its action as a depressant of the central nervous system. The magnesium ion also causes a dilatation of peripheral vessels with a resultant drop of blood pressure.

The usual adult dosage is 10 cc of a 25 per cent solution given intramuscularly. For a more rapid effect at 6 per cent solution may be given intravenously. The intravenous dosage is 1-2 grams.

Magnesium Sulfate given intravenously has a much shorter duration than when given intramuscularly. Ten gms. of intramuscular Magnesium Sulfate in a 25 per cent solution can be given every two hours with a wide margin of safety. Magnesium Sulfate is effective at a blood level of 4-8 mg/100 cc of plasma where as the lethal dosage is 18-20 mg/100 cc of plasma.

The rate of intravenous injection of Magnesium Sulfate should not exceed 3 cc of a six per cent solution per minute.

Calcium chloride or gluconate for intravenous injection should be on hand to be used as an antidote in the event of respiratory paralysis following the parenteral administration of Magnesium Sulfate.

The patient should be observed carefully for signs of Magnesium overdosage as evidenced by a depression of reflexes, an abrupt fall in blood pressure, flushing of the skin, nausea, or depression of respiration.

Magnesium Sulfate may be used in conjunction with other agents such as Apresoline in the treatment of eclamptic convulsion.

Questions and Comments

Dr. Richard Angle:

Page in his monograph points out that the crux of the situation is to prevent eclampsia. He states that the mortality rate of preeclampsia is almost nil, whereas the mortality rate for eclampsia is in the neighborhood of 10 per cent, sometimes less.

He feels if the disease can be contained to preeclampsia, and its progression to eclampsia prevented the problem has been solved. Since the occurrence of a convulsive seizure is the event that distinguishes eclampsia from preeclampsia, he feels the main effort should be to prevent convulsions.

For this reason, he advocates the use of Dilantin Sodium in cases of preeclampsia and in his experience for the preceding five years there were no cases of eclampsia developing after the introduction of this treatment. Of course, he used other standard treatments, also. But, I think his point is well made. Preeclampsia has a very low mortality, eclampsia has a relatively high mortality and an attempt should be made to prevent the preeclamptic state from progressing. Page further states that in his opinion the preeclamptic state is often undertreated and the eclamptic patient is often overtreated.

Dr. Whipple:

I have not known much about the use of Dilantin in these patients. In reading about eclampsia there is much written about cerebral dysarthria in the convulsing patient. There is said to be a family history of epilepsy or a history

that the patient had convulsions with febrile illnesses in childhood. Many of these patients are said to have abnormal electro-encephalograms.

These background observations would seem to support the idea that Dilantin might have a use in the prevention of convulsions in the preeclamptic. There are preeclamptics that never have convulsions and die, but in general what Dr. Page says is so, once convulsions develop the mortality rate is much greater.

Dr. Bergere Kenney:

In general, in treating patients who have oliguria or in particular acute renal failure, you usually limit rather than push fluids. Are you following a different principle in your treatment of the preeclamptic and eclamptic patient?

Dr. Snow:

Usually after you start treatment the initially low urinary output will increase.

Dr. Ellis:

I think the point of difference in management, here, is that most of these patients do not have or develop acute renal failure.

Dr. Angle:

I want to ask one question about the periportal liver necrosis. Does this sometimes go on to complete necrosis of the liver? Did you say that?

Dr. Ellis:

Yes, I did.

Dr. Angle:

Does this have anything to do with acute yellow atrophy?

Dr. Ellis:

Acute yellow atrophy is an older name for diffuse or massive necrosis of the liver. There are reasons for this replacement of terms. One is that the liver isn't always yellow. The condition called acute yellow atrophy occurs in eclampsia and in many other conditions. I do not know any way to differentiate by pathologic changes, the rare diffuse necrosis occurring in eclampsia from diffuse necrosis occurring in other diseases.

Dr. Angle:

Isn't acute yellow atrophy of pregnancy an example of overwhelming infectious hepatitis occuring during pregnancy?

Dr. Ellis:

I am not familiar with the term "acute yellow atrophy of pregnancy", however, acute yellow atrophy or massive necrosis of the liver as a progression of infectious hepatitis is well known. This progression is more common in pregnancy.

Dr. Angle:

I would like to know if acute yellow atrophy of pregnancy as a manifestation of infectious hepatitis in the pregnant patient is a different condition from the diffuse necrosis that you say is a manifestation of toxemia. I don't know whether they are two separate things or not. What is your opinion?

Dr. Ellis:

Acute yellow atrophy used synonymously as diffuse necrosis of the liver can be and is a complication of toxemia of pregnancy. The problem with patients who are pregnant that contract infectious hepatitis that progresses to diffuse necrosis of the liver is they are more prone to do that than the non-pregnant person, probably for the same reason that they get more severe poliomyelitis. This condition is not the same as the patient who develops diffuse necrosis of the liver in association with eclampsia or preeclampsia.

Seminar Summary: Dr. Raymond Young:

The participants in this seminar have covered the subject admirably, and only a few points remain to be emphasized.

The best way to treat eclampsia is not to let it occur. Once a toxemic patient begins to convulse, the prognosis becomes grave. Not only adequate, but meticulous and painstaking prenatal care, is the obligation of every one of us who attends pregnant patients.

Notice that neither case which Dr. Soldow presented received any prenatal care whatsoever.

While I am not at all sure that the second case was one of the so-called "true" eclamptics, still early and proper prenatal care might well have resulted in a happier outcome.

When the present Chicago Lying-in Hospital was built, Dr. DeLee ordered inscribed in Latin on a plaque in the Doctor's lounge, "Pregnancy in itself places the woman in danger of death". a professor of Classical Languages at the University of Chicago, with a remarkable sense of humor for a Latin teacher, added the initials "G. M., B. L.", meaning "Good Motto, Bad Latin".

Regardless of Dr. DeLee's Latin, his motto is not only good, it should be a fundamental truth to anyone practicing obstetrics.

If one hasn't the time or the inclination to give **excellent** prenatal care, he must not accept the patient in the first place.

Excessive Weight Gain

Excessive weight gain is usually the first warning of true preeclampsia, and it should be treated vigorously. Once true preeclampsia is established, it should be treated **radically.** This means, simply, that if by the 35th week the condition has not responded to conservative measures, then the pregnancy **must** be terminated, either by the induction of labor, or, failing that, by Cesarean section.

The fetuses of toxemic patients do notoriously poorly. They are invariably abnormally small for their intrauterine ages. Statistically, the healthy, even though quite premature, babies of these mothers have a much higher survival rate than the infants who have been exposed for a longer time to the mother's disease **in utero.**

The physician who thinks that "watchful waiting" will result in a large and healthy term baby is simply deluding himself.

Once convulsions have occurred, of course, the pregnancy should be ignored and the disease should be treated conservatively. When the eclampsia has been satisfactorily controlled, delivery by Cesarean section should be performed promptly, but then and only then.

Two Other Points

Two other points remain. First, I feel that the intravenous administration of Magnesium Sulfate should be followed by magnesium blood level determinations. While Magnesium Sulfate is the most valuable single drug we have in treating this condition, its use is not completely without risk.

Second, Dieckman, among others, preached incessantly that **true** preeclampsia and eclampsia were most unlikely to recur in subsequent pregnancies, the original toxic episode having occurred in a primigravida. Certainly, sterilization procedures in primiparae with histories of true toxemias and therapeutic abortions in multigravidae with such histories, while still being done in some places, are indefensible. These mothers, rather, should be reassured as to the unlikelihood of recurrences, and should be encouraged to bear more children.

When the etiology of eclampsia is finally defined, I am sure that a multitude of interacting factors will be implicated. Such definition must, of course, also explain the relatively high incidence of eclampsia first occurring, without warning, in the postpartum period.

Bibliography

1. Assali, N.S.: Treatment of eclampsia and preeclampsia. Clin. Obst. & Gynec. 1:379, 1958
2. Bartbolomew, R. A., Colvin, E. P., Grimes, W. H., Fisk, J. S., Lester, Wm. H., and Galloway, Wm. H.: Factors pertinent to the etiology of eclamptogenic toxemia. Amer. J. Obs. & Gynec., 74:64, 1957.
3. Browne, F. J.: Aetiology of preeclamptic toxaemia and eclampsia. Lancet, 1:115, 1958.
4. Browne, J. Mc.: The uterine circulation in toxemia. Clin. Obst. & Gynec., 1:341, 1958.
5. Bryant, R. D.: Hypotensive drugs in management of toxemia of pregnancy. Postgrad. Med., 22:354, 1957.
6. Burstein, R., Blumenthal, H. T., and Soule, S.D.: Histogenesis of pathological processes in placentas of metabolic disease in pregnancy. Amer. J. Obs. & Gynec., 74:85, 1957.
7. Caldeyro-Barcia, R., Poseiro, J. J., Alvarez, H. and Tost, P.: Action of chlor promazine on uterine contractility and arterial pressure in normal and toxemia pregnant women. Amer. J. Obs. & Gynec., 75:1088, 1958.
8. Corkill, T. F.: Eclampsia-changes in pattern. A commentary on a New Zealand investigation. J. Obst. & Gynaec. Brit. Emp., 63:67, 1957.
9. Dieckmann, Wm. J., Potter, Ed. L., and McCartney, Chas. P.: Renal biopsies from patients with toxemia of pregnancy. Amer. J. Obs. & Gynec., 73:1, 1957.
10. Dieckmann, Wm. J., McCartney, Chas. P., and Harrod, J. P. Jr.: Kidney biopsies in multiparous patients with vascular renal disease in pregnancy. Amer. J. Obs. & Gynec., 75:634, 1958.
11. Eastman, N. J.: Williams Obstetrics, Ed. 10, New York, Appleton-Century-Crofts, 1950.
12. Farquhar, M. G., Vernier, R. L., and Good, R. A.: An electron microscope study of the glomerulus in nephrosis, glomerulonephritis, and lupus erythematosus. J. Exper. Med., 106:659, 1957.
13. Gibson, G. B.: The immediate prognosis of toxemia of late pregnancy. J. Obst. & Gynaec. Brit. Emp., 61:602, 1954.
14. Hilton, J. G., and Johnson, R. F.: Changes in blood oxytocinase during parturition. Amer. J. Obs. & Gynec., 78:479, 1959.
15. Hoover, C. R., and Bartholomew, R. A.: Acid soluble nucleotides in placentas from normal and toxic patients. Obs. & Gynec., 14:309, 1959.
16. Jeffcoate, T. N. A., and Scott, J. S.: Some observations on the placental factor in pregnancy toxemia. Amer. J. Obs. & Gynec., 77:475, 1959.
17. Kennan, A. L., Bell, W. H., Creskoff, A., and Bachman, C.: Pathologic physiology of the clotting mechanism in eclampsia. Amer. J. Obs. & Gynec., 74:1029, 1957.
18. McCall, Milton L.: Present concepts in Toxemia of pregnancy. Disease-a-Month. Chicago: The Yearbook Publishers, Oct. 1959.
19. McKay, D. G., Merrill, S. J., Weever, A. E., Hertig, A. T., and Reid, D. E.: The pathologic anatomy of eclampsia. Amer. J. Obs. & Gynec., 66:507, 1953.
20. Molumphy, P. E. and Garcia, R.: Treatment of severe toxemia of pregnancy with intravenous magnesium sulfate apresoline. Obst. & Gynec., 14:193, 1959.
21. Nesbit, R. E. L.: Pathology of the placenta in toxemia. Clin. Obs. & Gynec., 1:364, 1958.
22. Plenll, A. H. and Gray, M. J.: Total body water, sodium space, and total exchangable sodium in normal and toxemic pregnant women. Amer. J. Obs. & Gynec., 78:472, 1959.
23. Pritchard, J. A., Ratnoff, O. D. and Wisman, R.: Hemostatic defects and increased red cell destruction in preeclampsia and eclampsia. Obst. & Gynec., 4:159, 1954.
24. Rotton, W. N., Sachtleben, M. R., and Friedman, E. A.: Migraine and eclampsia. Obst. & Gynec., 14:322, 1959.
25. Snow, R. H., Bruns, P. D., and Drose, V. E.: Effect of hydergine on preeclampsia and uterine contractility. Amer. J. Obs. & Gynec., 70:302, 1955.
26. Spargo, B., McCartney, C. P., and Winemiller, R.: Glomerular capillary endotheliosis in toxemia of pregnancy. A.M.A. Arch. Path., 68:593, 1959.
27. Speck, George: Eclampsia in the 16th week of gestation. Obs. & Gynec., 15:70, 1959.
28. Thaysen, H.J., Gjorup, S., and Munchk, O.: Prognosis in acute renal failure following complications in pregnancy and delivery. Acta Medica Scandinavia. 163 (2):145, 1959.
29. Vincent, Charlton R.: Jaundice in pregnancy. Obst. & Gynec., 9(5):595, 1957.

Porphyrin and Magnesium Supplementation in Collagen and Degenerative Disease

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Specific instructions and medication can be given the patient with arteriosclerotic and atherosclerotic disease that will produce improvement in structure and function. The net effect of these measures must be the improvement of oxidative metabolism and the mobilization and metabolism or excretion of pathologic tissues.[1,2]

Maintenance of an adequate supply of etioporphyrin, Type III, for heme synthesis is essential for continuous replacement of the enzymes of the respiratory chain.[3,4,5,6] Examination of the biochemical patterns in cardiovascular disease indicates interference in synthesis and function of the heme-derived enzyme systems. Attention is especially drawn to the diversion of carbohydrate into cholesterol synthesis when the Krebs Cycle is inhibited, and that fibroplasia is accelerated when oxidative capacity is reduced.[7,8,9] The latter mechanism is recognized in mechanical reduction of blood supply as in Volkmann's Contracture, but is usually not considered when the oxidative block is chemical. Time and space prohibit more complete discussion here of biochemical mechanism. This can be obtained from the references.[10-17]

Fibroplasia and Hypecholesteremia

Since fibroplasia and hypercholesteremia are intimately related to arteriosclerotic and atherosclerotic disease, and since fibroplasia is characteristic of the collagen diseases,[18] the following measures have been correlated into a basic program for patients with the clinical signs and symptoms of cardiovascular disease: — Type III etioporphyrin supplementation to support heme synthesis; magnesium in complexed form to enhance carbohydrate metabolism and inhibit hyaluronidase; reduction of intake of magnesium-low and mineral-low foods (refined sugar, Karo and white flour); reduction of lead intake by elimination of tea, aluminum cookware and tobacco; elimination of milk to withdraw growth-stimulating factors and possibility of viral seeding; substitution of vegetable oils and butter to replace hydrogenated fats, thus increasing the intake of linoleic acid; and maintenance of Vitamin E intake to insure the antioxidant activity provided by the tocopherols.

Long Range Compliance

The necessity for long range compliance with the nutritional selection is explained to these patients. Supplementation with the magnesium and porphyrinic material is specified as necessary of continuation only so long as essential to achieve and maintain structural and functional improvement. The time necessary for this varies with the individual patient, some apparently requiring continuous supplementation. The majority of patients, however, can discontinue medication by the time their weight has reached an optimum level, a consistent exercise schedule has been established, and the functional state of the patient no longer requires support.

The following data was accumulated on twenty-eight (28) cases treated with schedules which included the above-listed measures:

Examination of the data listed reveals consistent normalization of blood pressure without hypotensive medication, improvement in hematocrit and hemoglobin, and consistent reduction of hypercholesteremia.

Clinically the patients evidence increased mental alertness, decrease in musculo-skeletal pain and stiffness, improvement in gross strength and endurance, less shortness of breath on exertion, decrease or disappearance of angina of effort, improvement in skin texture, darkening of the hair, and improvement in peripheral circulation. These changes have been noted in many patients in the 70 to 80 year age group. The majority of these patients reduced or eliminated symptomatic medication.

The above noted clinical and laboratory improvement is more difficult to achieve in the majority of patients without including porphyrin supplementation at least for an initial period of sixty to ninety days. The selection of porphyrin material for clinical use is of major importance. In the author's experience a metal-free, water-soluble potassium salt of etioporphyrin, Type III, from vegetable origin has proven to be the most effective.* The usual dosage was ½ gram daily. The patient response to this therapy indicates that this type porphyrin is utilized in the regeneration of the heme-derixed oxidative enzymes.

Patient	Age	Clinical Diagnosis	Date	Hgb.	Hct.	Choles:	B.P.:	Urine Albu.	C.R.P.
Mrs. D. J.	44	Rheumatoid arthritis	9-17-58	10.5	35	250	120/80	neg.	neg.
		Colitis, chronic	12- 1-58	12.6	40	190	120/80	neg.	neg.
Mrs. H. S.	48	Sinusitis, Psoriasis	1-19-59	12.2	37	242	122/72	neg.	neg.
		Multiple allergies	6- 5-59	13.4	42	176	114/76	neg.	neg.
Mrs. M. B.	72	Osteoarthritis	9- 3-58	11.2	36	216	184/110	neg.	neg.
		Arteriosclerosis	1- 7-59	13	40	180	138/78	neg.	neg.
		Hypertension, Psoriasis							
Mrs. E. M.	53	Rheumatoid arthritis	3- 3-59	10.2	33		118/72	neg.	1+
		Anemia	4- 1-59	13.2	40		120/70	neg.	neg.
Mrs. S. M.	69	Arteriosclerosis	9-17-58	12.2	39	362	220/90	neg.	
		Hypertension	10-15-58	14	42	202	140/82	neg.	
Mrs. B. L.	38	Rheumatoid arthritis	10- 7-58	10.5	36	138	106/60	2+	2+
		Anemia	3- 3-59	13	40		114/72	neg.	neg.
Mrs. M. J.	66	Osteoarthritis	7-22-58	11.6	36	354	126/70	neg.	neg.
		Arteriosclerosis	1-12-59	14	42	196	140/82	neg.	neg.
Mrs. L. G.	69	Osteoarthritis	7-31-58	10.8	37	329	130/80	neg.	neg.
		Arteriosclerosis	10- 1-58	13.5	41	196	130/80	neg.	neg.
		Chronic Sinusitis							
Mrs. M. V.	45	Osteoarthritis	2- 9-59	12.2	39	210	122/74	neg.	2+
			5- 7-59	14	42		114/70	neg.	neg.
Mrs. H. N.	42	Rheumatoid arthritis	7- 3-58	11.9	37	348	104/60	1+	neg.
		Hypothyroidism	1-29-59	14.4	46	196	108/60	neg.	neg.
Mrs. H. D.	65	Rheumatoid arthritis	12- 3-58	11.7	36	198	92/36	neg.	3+
		Hypoadrenia	4-14-59	12.4	39	200	114/68	neg.	2+
Miss S. S.	11	Rheumatoid arthritis	11- 7-58	12.6	40	(Sed. rate 40)		tr.	pos.
			2-12-59	14.3	42	(Sed. rate 26)		neg.	neg.
Miss F. M.	72	Arthritis, mixed	9-30-58	10.7	36	(Sed. rate 22)		neg.	neg.
		Arteriosclerosis	3-24-59	15.4	40	(Sed. rate 18)		neg.	neg.
		Hypoadrenia							
Mrs. M. D.	37	Obesity, Sinusitis	1-19-59	12.6	40	208	154/100	neg.	
		Hypertension	4-3-59	13	40	193	120/80		
Mrs. R. M.	59	Rheumatoid arthritis	1-15-59	10.2	34			neg.	4+
		Hypoadrenia	4- 6-59	14	41			neg.	2+
		Bronchioctasis							
Mrs. C. D.	44	Hypothyroidism	6-16-58	10.5	38	160	84/42	neg.	
		Metabolic insufficiency	3-24-59	14.2	41		116/74	neg.	
Mrs. H. R.	71	Arteriosclerosis	1-23-59	13	40	262	110/70	neg.	
		Osteoarthritis	3-13-59	13	42	180	124/76	neg.	
		Osteoporosis							
Mr. S. A.	5	Fibrosis pancreas	11-28-58	9	30	(Child)			
		Fibrosis pulmonary	3-19-59	13	42				
		Allergies multiple							
Mrs. R. S.	40	Rheumatoid arthritis	11-13-58	10.8	35	117	102/60	1+	4+
			3- 3-59	13	40		104/66	neg.	1+

Patient	Age	Clinical Diagnosis	Date	Hgb.	Hct.	Choles:	B.P.:	Urine Albu.	C.R.P.
Mrs. L. G.	69	Arteriosclerosis	7-31-58	10.8	37	329	124/76	neg.	
		Osteoarthritis	4- 3-59	13.5	41	196	120/70	neg.	
		Chronic sinusitis							
Mrs. C. F.	48	Myxedema. Obesity	11-18-58	11.9	38	254	122/76	neg.	
		Arteriosclerosis	4-15-59	13	40	180	116/68	neg.	
Miss B. Y.	47	Rheumatoid arthritis	1- 8-59	9.6	31		100/70	neg.	4+
		Hypoadrenia	3-11-59	13	40		98/62	neg.	1+
Mrs. M. P.	70	Arteriosclerosis	9-12-58	10.8	38	250	190/80	neg.	
		Hypertension, Myxedema	11-17-58	13.6	41	200	146/80		
		Psoriasis							
Mrs. K. W.	35	Rheumatoid arthritis	11-20-58	11	34		118/70	neg.	
		Hypothyroidism with Myxedema	1-26-59	12.6	39		120/70	neg.	
Mrs. E. C.	76	Arteriosclerosis	11-21-58	9.9	30	320	160/90	neg.	4+
		Hypertensive coronary disease, Chronic anemia	2- 4-59	12.6	40	190	130/84	neg.	2+
Mrs. F. P.	28	Rheumatoid arthritis	7-13-58	11.5	37		100/68	neg.	
			2- 3-59	12.8	40		118/72	neg.	
Mrs. L. R.	60	Rheumatoid arthritis	10-23-58	8.4	30	252	110/72	4+	
		Sinusitis, Hypoadrenia	3-30-59	12.2	39	178	132/70	3+	
Mrs. B. R.	51	Rheumatoid arthritis	9-11-58	10.5	37	210	102/64	neg.	
			4-15-59	13.4	41	180	116/74	neg.	

Withdrawal and replacement of porphyrin and magnesium supplementation and periods of omission and compliance with the other specified measures will convince the patient and the attending physician that these items of the regimen are essential for normalization of intermediary metabolism and maintenance of an optimal functional balance.

Summary

The possibility of devising a total program for correction of basic metabolic faults exists. A program for support of heme synthesis by etioporphyrin, Type III, supplementation, rational dietary selection, restriction of total caloric intake, increased magnesium intake and decrease in lead intake, which has been successfully applied to patients with cardiovascular disease, is presented. Similar long range studies are felt to be the privilege and responsibility of the private practitioners of medicine, since these physicians can best evaluate the long range compliance and response of the patient.

Acknowledgments

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**Hyalex or Cardenz, for magnesium supplementation, was supplied by Miller Pharmacal Co., West Chicago, Illinois.

Bibliography

1. Watterson, R. P.: Storage Protein, Am. Pract. & Dig. of Treatment, 6:896, 1955.
2. Watterson, R. P.: Osteoarthritis Reversible, Am. Pract. & Dig. of Treatment, 9:1995, 1958.
3. Watterson, R. P.: Porphyrin Metabolism, Am. Pract. & Dig. of Treatment, (Sept.) 1959, V. 10, No. 9.
4. Ciba Foundation Symposium: Porphyrin Biosynthesis and Metabilism, Little Brown & Co., Boston, 1955.
5. Vannotti, A.: Porphyrins, (Translated by C. Rimington) Hilger & Watts Ltd., Hilger Division, London, 1954. (Printed by Charles Pearson & Son Ltd., London).
6. National Research Council: Handbook of Respiration, W. B. Saunders Co., 1958.
7. Everett, M. R.: Medical Biochemistry. P. Hoeber Inc., New York, 1944.
8. Sodeman, W.: Pathologic Psyiology, W. B. Saunders Co., 1952.
9. Duncan, G. G.: Diseases of Metabolism, W. B. Saunders Co., 1952.
10. Burgi, E.: Das Chlorophyll Als Pharmakon, Geo. Thieme Co., Leipzig, 1932.
11. Watterson, R. P.: Lead Exposure a Common Cause of Disease, Southwestern Medicine, Vol. XL, No. 12.
12. Martin, G.: Biological Antagonism, New York, The Blakiston Co., 1951.
13. Brody, S.: Bioenergetics and Growth. Reinhold Publ. Corp., 1945.
14. Yarbrough, R.: Maj., U.S.A.F. (MC), Portland, Ore.: Preliminary Observations on Therapy with a Porphyrinic Compound in Arteriosclerosis and Associated Coronary Conditions. (To be published)
15. National Academy of Sciences: Symposium on Atherosclerosis, National Research Council, Washington 25, D. C., 1954.
16. James, H. C.: Protoporphyrin through Chlorophyll. Schultz, J.: & Rosenthal, S.: Biological Effects of Porphyrins. Symposium on Porphyrins, Boston, 1959.
17. Altschul, R.: Influence of Cytochrome C and Hematoporphyrin on Serum Cholesterol. Magazine for Circulation Research, V. 48 - 844, 1959.
18. Karsner, H.: Human Pathology. J. B. Lippincott Co., Philadelphia. 1949.

THE PRESIDENT'S PAGE



Dr. Deter

"I Am A Doctor"

By Russell L. Deter, M.D., *El Paso*
President, Southwestern Medical Association

"The first indispensible qualification of a physician was that he should have studied well the science of medicine. He should be a man who has read and remembered much of medical subjects; who has great experience of his profession and who hears the case of his patient with calmness; who is painstaking in diagnosing the diseases of his patients; who knows the various bodily organs and understands their function; who treats his patient conscientiously; who is sweet-tongued, gentle, friendly, zealous of the honor of his profession; adverse to protracting to disease for greed or money; who is God-fearing. An ideal healer heals for the sake of healing; he is the best among the healers. The second in rank in the profession is he who practices his art, actuated by the desire for reward and renown in this world. The third, in point of honor, works both for the sake of merit and for money, but gives preference to the first. The fourth in position of nobility in his profession is the physician who rates money higher than merit. The lowest in the skill is the greedy and heartless physician who dishonors his noble profession. The duty of the conscientious physician is to watch carefully the effect of the medicine he prescribed for his patient from day to day; to change and try a still better drug than the one he has already given; to visit the invalid daily, at a fixed hour; to labor zealously to cure him; to combat the disease of his patient as if it were his own enemy."*

Zoroastrian Ideal

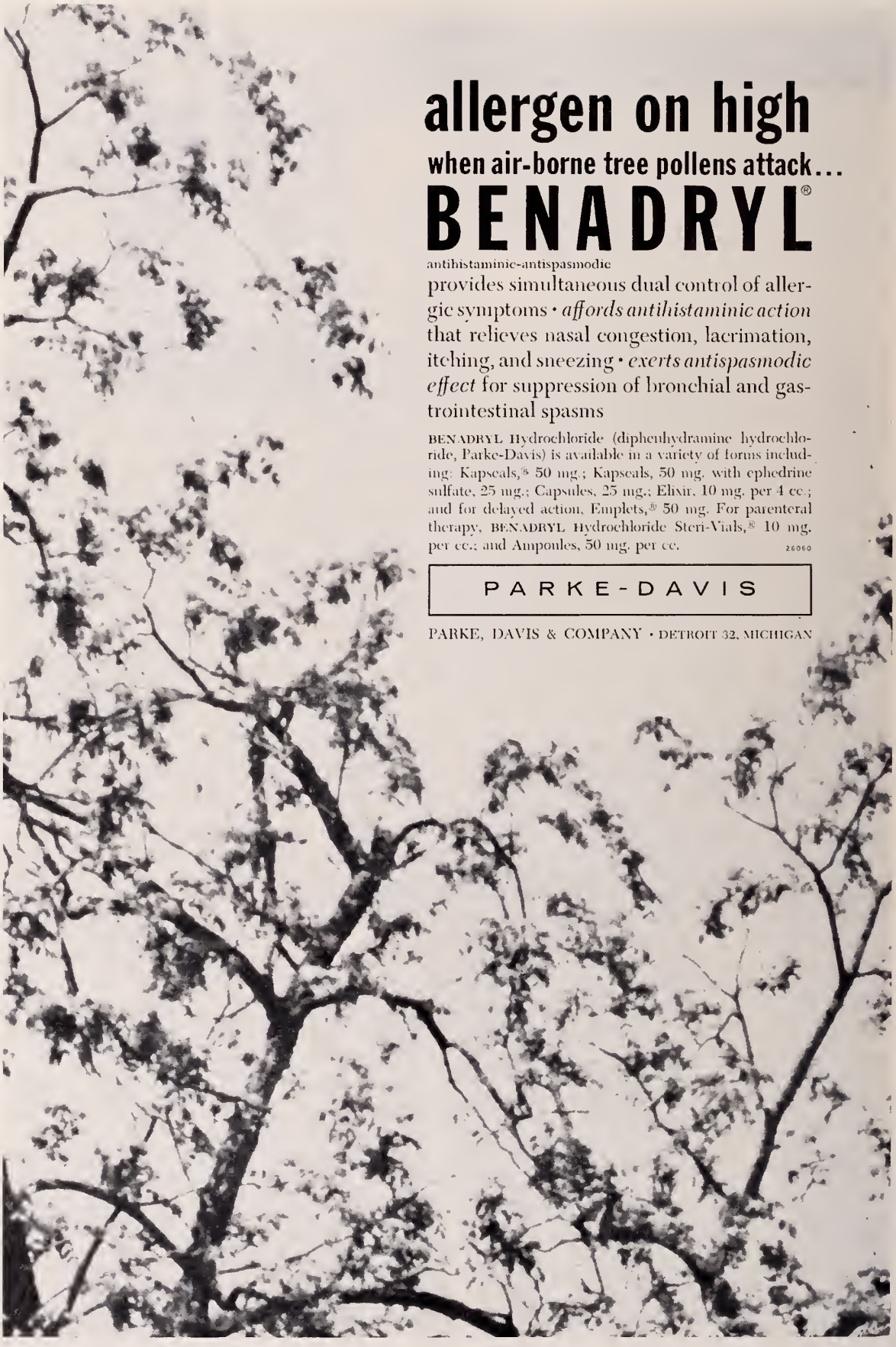
The above statement is the Zoroastrian civilization's ideal for its physicians around the year 600 B.C. in Persia. How little these ideals have changed in some 2,600 years—! As the Bible of the Christian faith and the Torah of the Jewish faith have survived disaster and floods, kings and dictators, revolutions and wars, Nazism, Fascism, Communism and all of the other isms and tricky innovations that have come from puny minds of men in their mad quest for power and an attempt to completely subjugate their fellow men—so has medicine survived these things.

*A Medical History of Persia—by Cyril Elgood, M.A., M.D., FRCP

Medicine has survived centuries of superstition and faith healing, the mystic era of the medicine man of ancient times and even of modern times, now we face democracy vs. socialism. We shall survive.

Doctors of Medicine

I AM A DOCTOR — so help me, I want my sons to be doctors as long as deep in their hearts they believe in the tenets of medicine as set forth in Persia some 2,600 years ago. Let us stop this business of—"If socialized medicine comes I do not want my son or daughter to be a doctor!" Who do we think we are kidding? What makes anyone think that if medicine is socialized everything else won't be socialized too? As has been said, as long as our thirst for knowledge persists, as long as our desire for research, teaching and the seeking of answers to the cause and cure of disease continues unabated, no one but us will wear the mantle of Aesculapious — we ARE the doctors of medicine.



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*References: Maxwell, M. H., et al: Peritoneal Dialysis: 1. Techniques and Applications, J. A. M. A. 170:917 (June 20) 1959.

Doolan, P. D., et al: An Evaluation of Intermittent Peritoneal Lavage, Am. J. Med., 26:831 (June) 1959.



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CPC

Clinical Pathological Conference

R. E. Thomason General Hospital, El Paso

Case No. 1364, March 17, 1960

F. P. Bornstein, M.D., *Editor*
Presentation of case by Victor Blanco, M.D.

History: Dr. Nathan Kleban:

A 50-year-old unemployed cook was admitted to the hospital on October 29, 1959. Six weeks before admission the patient began to experience increasing weakness and absence of appetite. He denied abdominal pain, vomiting, diarrhea or other symptoms.

The patient had been in good health until the present illness.

His father died at age 34 of tuberculosis. His mother died of heart disease at age 65. A grandfather had died of cancer of the stomach at age 65. One sister had died of scarlet fever and another of diptheria.

Physical Examination:

T. 100; P. 96; R. 24; B. P. 104/64.

The patient appeared chronically ill. The right pupil was larger than the left, but both reacted to light. A firm, non-tender, movable mass was felt in the epigastric region. The left hypodhondrium was tender and resistant to palpation.

Hospital Course:

Daily maximum temperatures were about 102. Parenteral fluids were administered. Although the patient moaned and stated he was uncomfortable, he denied having pain. He refused oral fluid and food, was restless but unable to turn himself. On November 12 an operation was performed.

Laboratory Findings:

Blood counts: 10-29-59—WBC 11,100, Hb. 16.3 gms., Ht. 48 vol.%, Stabs. 2, Segs. 72, Lymphs. 21, Monos. 4; 11-5-59—Hb. 15.5 gms., Ht. 46 vol.%, WBC 12,200, Eosino .2, Stabs. 2, Segs. 71, Lymphs. 24, Monos. 1; 11-11-59—Hb. 12 gms., WBC 7,400, Eosino. 4, Stabs. 1, Segs. 67, Lymphs. 26.

Urinalyses: 10-30-59 — Yellow, cloudy, acid S.G. 1.014, Albumin 1+, Sugar negative, WBC 5-10/hpf, many sq. ep. cells, numerous bacteria—bile negative; 10-11-59—Yellow, cloudy, acid, S.G. 1,005, Albumin 1+, sugar negative, WBC 20-25/hpf, RBC abundant, many sq. ep. cells, many bacteria, few urates; 10-31-59—Urine culture—negative.

Chemistry. 10-31-59—Amylase—68; Glucose—77 mg.%; Van den Bergh Direct—.235, Indirect —.435. 11-1-59—Calcium—3.7 mEq/L; CO_2 capacity—15 mEq/L; Chlorides—94 mEq/L; Potassium—3.7 mEq/L; Sodium—122 mEq/L. 11-2-59—CO_2 capacity—23 mEq/L; Chlorides—82 mEq/L; Potassium—4.3 mEq/L. 11-12-59—Chlorides—16 mEq/L; Potassium—3.2 mEq/L; Sodium—132 mEq/L.

Febrile agglutinations: 11-2-59—Typhoid O & H—negative; Paratyphoid A & B—negative; Brucella and Proteus OX19- negative.

Thymol turbidity: 11-3-59—1.0 unit.

Blood Culture: 11-5-59—negative.

Feces: 10-29-59—Trace occult blood, amoebiasis negative; 11-2-59—negative for parasites or ova.

Serology: 10-30-59—Negative.

Ceph. Floc.: 24 hours negative, 48 hours 1+.

X-rays: 11-2-59—Chest, barium enema—Conclusions: Displacement of the large bowel by an extrinsic mass. Retention of dye in the left kidney with obstructive change suggest a retroperitoneal origin of the mass.

11-5-59—IVP—Findings as described are consistent with a mass lesion in the left kidney and should be further evaluated by retrograde examination on this day. No definite function is demonstrated on the right, however, a very heavy gut shadow causes considerable interference with the examination. Since no dye is seen in the bladder shadow, the examination indicates poor renal function.

X-Ray Discussion: Dr. Vincent Ravel:

The urogram was done September 30 and was unsatisfactory technically. A second examination, a barium enema, was done the second of November and the dye that was instilled over 48 hours before was observed. Now the barium enema

itself is not remarkable except for the displacement of the colon by a very large retroperitoneal mass which apparently is connected to or indistinguishable from the kidney. At this time we were able to see the grossly hydronephrotic findings of the calyceal system.

Another intravenous urogram confirmed the previously hydronephrotic left kidney. At no time were we able to visualize the calyceal and pelvic system of the right kidney, or the ureter on the right. This may be of course obscured by the heavy colonic soft tissues and the gas in the colon.

There are also some other secondary findings such as calcification in the iliac vessels secondary to a peripheral arteriosclerotic vascular process. You can all see the appendix well on the barium enema. Fundamentally we have a large retroperitoneal soft tissue mass on the left, indistinguishable from the lower pole of the left kidney.

This probably represents a carcinoma, although it could be a cyst of the kidney. The other soft tissue masses of this size which might be considered are pancreatic cyst or enlargement of the spleen, but this is unlikely.

Clinical Discussion: Dr. Victor Blanco:

After I saw the X-rays it changed my way of thinking. The only thing that I knew for sure from the protocol was the fact that the patient's profession didn't have anything to do with his illness. The history is very meager. The patient had increasing weakness and absence of appetite, no abdominal pain, vomiting or diarrhea or other symptoms. The physical examination states that the right pupil is larger than the left and both react to light. To me that does not mean anything. The patient had a firm, non-tender, mobile or movable mass felt in the epigastric region, if it was in the epigastric region?

In the X-rays to me that is not epigastric region. I worked up the protocol as assuming that there was a mass in the epigastric region, but from the X-rays I can see that this mass covers the entire middle abdomen. Actually it is mostly below the epigastric region. The mass is not described except that it is mobile and non-tender, it doesn't say what type it is, whether it is smooth or nodular.

X-Ray Findings

So I am going to have to go on from the X-ray findings, because what I considered previously couldn't possibly be what this man has got, except a retroperitoneal mass.

As to the laboratory work, this man is not anemic, his white count is not elevated out of proportion, the urine shows a 1+ albumin and a few white cells per high power field, and many bacteria, bile was negative. Evidently the man was worked up to see if he had any liver metastasis as a Van den Bergh was ordered. His amylase was normal.

His Van den Bergh is .235 direct and indirect is .435. Well, the direct, as I understand it, should be negative and the indirect should be between .25 and 1, so that lies within normal limits. The calcium lies within normal limits. The first reading of the CO_2 combining power is 15 mEq/L which is extremely low and that signifies that the man had acidosis. His chlorides are 94, potassium 3.7, and his sodium 122 mEq/L.

Chemical Disturbances

Now evidently these chemical disturbances were corrected to a certain extent by giving him IV fluids and it is possible that his electrolytes are slightly below normal because the man had not been eating. How much he had been eating I do not know. The protocol states that the man has not had any vomiting or any diarrhea.

The febrile agglutinations are negative. Thymol turbidity is normal, blood culture is negative, the feces examination is negative for occult blood, the sedimentation rate is normal. The cephalin flocculation is 1+ within 48 hours which does not mean too much as far as parenchymal damage is concerned. There was no BUN done. X-rays studies were started on the patient right away.

A chest was done, and a barium enema. When I read the protocol I was surprised that an upper GI was not done since the mass was supposed to be in the epigastrium. On the 5th of November they die the IVP which showed no definite function on the right side and the left showed retention of dye in the kidney. The patient must have had some type of obstruction of the ureter specially on the left side and as you can well see the mass lies mostly to the left side.

Retroperitoneal Mass

Therefore I will have to take this as a retroperitoneal mass. I had thought it might be a pancreatic cyst but I have never seen a pancreatic cyst this large and the patients usually have some abdominal pain, specially after eating, and vomiting. This man had neither. His only other complaint as stated in the protocol is abdominal discomfort and the patient did not say that he had any pain.

The differential diagnosis of retroperitoneal mass involved a great number of possibilities. In

the first place, it could be metastatic. There is no mention of a genital examination, the patient might have a tumor of the testicle, with extensive metastases retroperitoneally. I think that this mass is benign because it is freely movable.

Now I believe that the tenderness and guard which he had in the left hypochondrium is probably from the kidney, representing retention or obstructive symptoms of the kidney. Now what are the differential diagnoses of benign retroperitoneal masses. As I said before, I am going to have to go just from what I have seen.

The most common condition that I have seen is lipoma. This is a soft mass, it appears cystic, it is mobile. Although these masses are usually locally malignant, if excised totally the patient will get rid of the tumor.

Multilocular Cysts

It could be a cyst. I have seen kidneys with multilocular cysts; papillary cystadenocarcinoma of the kidney gives you a mass this large, and the mass is mobile simply because it is a locular mass filled with fluid. Fibrosarcomas or any of the nerve tissue tumors are usually fixed. I considered a neuroblastoma because of the pupils being unequal, but these tumors are usually found in children. I believe this mass is entirely too large for a pancreatic cyst. I even thought about aneurysms, until I saw the X-ray pictures.

So my best bet is that it is a benign retroperitoneal tumor, what it is, I don't know.

Dr. H. M. Gibson:

Dr. Blanco said all the essential things that can be said. Is the film of the first IVP available at all? Was there such a film? Can we see kidney shadows on that at all? The question here is what is the situation in that right kidney in addition to the trouble on the left side. What I am looking for is a film where we might get a reasonable idea whether there is a right renal shadow present. There is one diagnosis that I might add to those of Dr. Blanco and that is a crossed renal ectopia. So we have to assume if the urea nitrogen was this elevated that there must be some damage to the right kidney, or the right kidney is lacking. If we are to believe the laboratory work we have to assume that this is not a malignant process and that it is not a very badly infected process. I refer specially to the sedimentation rate. The sed. rate is notoriously sensitive in any renal condition, infection, or tumor, for that matter. So I am going to point out the possibility that this could be a congenital defect with a crossed renal ectopia, with the right kidney attached to the lower pole of the left kidney. Can anyone top that?

Dr. Solomon Heller:

I don't intend to top it. I think the most likely possibility is a huge pancreatic cyst. If the hemoglobins have any accuracy they drop rather strikingly from 16.3 to 12 grams on 11-11-59, therefore this mass may be the result of rather massive bleeding into a pancreatic cyst. The renal changes may represent a secondary pressure phenomenon.

Dr. W. R. Gaddis:

Unfortunately I am prejudiced because I have seen this patient. Dr. Akan and I presented this man on what was then Saturday morning rounds. I palpated this mass and if it will clarify the situation any for you, Vic, in my opinion it was nodular and it was very hard and the extent of motion as described here is very insignificant. I would say this also in respect to the laboratory procedures, they must have gotten the wrong blood when they took the sedimentation rate because I didn't believe it then and I don't believe it now.

Dr. Blanco:

All I want to say is how misleading such a protocol can be. Dr. Heller mentioned the fact that the man's hemoglobin was 16 grams and a couple of days later it was 12, well, the man probably had a hemoconcentration, he was given I-V fluids and his hemoconcentration dropped.

Dr. Licon:

I just wanted to ask Dr. Ravel how serious he was when he remarked that this might be a gumma on account of the opaque material around the buttocks.

Dr. Ravel:

That wasn't mentioned on the X-ray report but there were several films that showed opaque media in the buttocks which frequently represents bismuth injections for lues, and I just facetiously remarked, "Maybe it's a gumma."

Dr. Saul Appel:

For those in the back of the room who didn't hear it, there was a BUN done and it was 28, which of course is slightly elevated. We do not know on what date it was done. I agree with Dr. Blanco that the man was probably dehydrated on admission and yet it is very interesting that the admission urine was 1.014 specific gravity and 12 days later 1.05. On the latter time we can assume that he was well hydrated.

The electrolyte changes are rather interesting, too, if you will notice the low CO_2 capacity, the low chlorides, potassium and sodium shortly after

admission. As time went on the sodium rose a little bit and the potassium appears to get up to 4.3 but on the 12th of November it was down to 3.2 mEq/L which is low. An EKG would have been interesting to help clarify the potassium level and I might say that an EKG is a lot cheaper, quicker to obtain and sometimes more reliable in many laboratories, than the serum potassium. I am not trying to make a diagnosis at this stage of the game but I think that in a patient like this where you know that the potassium is low on one day, it is a good idea to follow it very carefully and to obtain EKGs and thereby you will have some control level from which you can make rough estimates from day to day. You don't have to get all 12 leads, if you just get the routine leads one, two and three every moning, it gives you a pretty fair idea of what his potassium level is in the myocardium and that is a pretty fair reflection until you can get the finer tests done later in the day.

Dr. Jack Postlewaite:

Well, I think this would be an amazing interpretive problem if you are going to do electrocardiograms to balance this man's electrolytes. In the first place, his potassium is low. Second place, his calcium is low, which has a very definite change on the cardiogram. In the third place, he has been chronically ill with malnutrition. Then you will notice the sodium is low, you will notice he is in acidosis and also in early uremia.

Dr. Appel:

The changes in uremia that occur in the EKG are so typical and so simple to recognize that given an unknown electrocardiogram, one can put a question down, is the patient in uremia? The effects of potassium on the T-waves are very easily seen. Calcium merely prolongs or shortens the Q-T interval. Therefore in a patient with the usual findings in uremia, namely, a low calcium and a high potassium, you get a very prolonged Q-T interval, following the R-way and then a peaked T-wave, it's really quite pretty, and in this patient I think it would be helpful anyway.

Dr. Bornstein:

Dr. Gupta, will you please report the surgical findings?

Dr. R. P. Gupta:

We made a left paramedian upper quadrant incision and a great big tumor was found as soon as we entered the peritoneal cavity. The omentum was involved and the stomach and part of the liver was involved in it and we thought that it was arising from the kidney and a biopsy was taken and then we closed.

Clinical Diagnosis: Abdominal mass.

Dr. Blanco's Diagnosis: Benign retroperitoneal tumor.

Pathological Diagnosis: Retroperitoneal reticulum cell sarcoma.

Pathological Discussion: Dr. F. P. Bornstein:

The first slide, Fig. 1, shows an extremely cellular and rather undifferentiated tumor. This is from the peritoneal biopsy. You can see the anaplastic, malignant, more or less uniform round cells, so a tentative diagnosis of a tumor in the lymphosarcoma group was made. Fluid and cell blocks made from the fluid received also revealed obvious malignant cells. The patient died one week later. There were no significant findings in the chest.



Figure 1

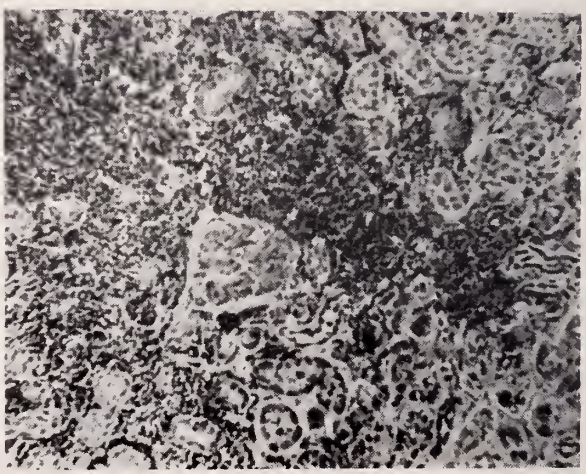


Figure 2

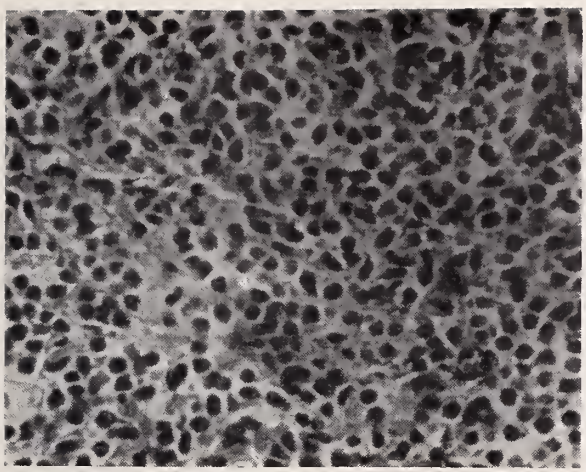


Figure 3

There were extensive metastatic lesions in the peritoneum, including the visceral peritoneum. However, the intestinal mucosa was intact. Obviously, therefore, this was not a primary tumor of the gastro-intestinal tract. A large retroperitoneal tumor was found measuring about 20 x 25 x 15 cm. This tumor involved the entire vena cava and left kidney.

Faint Outline

On sectioning only a faint outline of the kidney was demonstrable, with a minimal amount of renal tissue. It was therefore impossible to determine whether this was a primary renal tumor on the left side or whether this tumor arose retroperitoneally and involved this kidney secondarily. The right kidney was also involved and here sharply circumscribed, distinct metastases were easily visible.

The spleen weighed 600 grams. The follicles were greatly enlarged and at one pole was a hemorrhagic nodule measuring 4 cm. which represented metastatic tumor. Histologically the tumor was obviously malignant, obviously invasive and sufficiently differentiated to be classified as a reticulum cell sarcoma. (Figures 2 and 3)

In summary, we are dealing with a patient who rather quickly developed a rather enormous tumor mass which arose from somewhere in the peritoneal space. This tumor destroyed one kidney rather completely and metastasized to the other kidney, the spleen and the entire peritoneum.



MEDICAL OFFICERS — Shown at the recent meeting of the Texas Medical Association in Fort Worth are, left to right, Dr. Milford Rouse, Dallas, past president of TMA; Dr. Louis M. Orr of Orlando, Florida, president of the American Medical Association; Dr. May Owen, Fort Worth, newly-elected president of the Texas Medical Association; and Dr. Franklin W. Yeager of Corpus Christi, immediate past president of TMA. Not shown is Dr. Russell L. Deter of El Paso, elected vice president of Texas Medical Association.

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References: 1. Reports to the Squibb Institute, 1960. 2. David, N. A.; Porter, G. A., and Gray, R. H.: Monographs on Therapy 5:60 (Feb.) 1960. 3. Stenberg, E. S., Jr.; Benedetti, A., and Forsham, P. H.: Op. cit. 5:46 (Feb.) 1960. 4. Fuchs, M.; Moyer, J. H., and Newman, B. E.: Op. cit. 5:55 (Feb.) 1960. 5. Marriott, H. J. L., and Schamroth, L.: Op. cit. 5:14 (Feb.) 1960. 6. Ira, G. H., Jr.; Shaw, D. M., and Bogdonoff, M. D.: North Carolina M. J. 21:19 (Jan.) 1960. 7. Cohen, B. M.: M. Times, to be published. 8. Breneman, G. M. and Keyes, J. W.: Henry Ford Hosp. M. Bull. 7:281 (Dec.) 1959. 9. Forsham, P. H.: Squibb Clin. Res. Notes 2:5 (Dec.) 1959. 10. Larson, E.: Op. cit. 2:10 (Dec.) 1959. 11. Kirkendall, W. M.: Op. cit. 2:11 (Dec.) 1959. 12. Yu, P. N.: Op. cit. 2:12 (Dec.) 1959. 13. Weiss, S.; Weiss, J., and Weiss, B.: Op. cit. 2:13 (Dec.) 1959. 14. Moser, M.: Op. cit. 2.13 (Dec.) 1959. 15. Kahn, A., and Grenblatt, I. J.: Op. cit. 2:15 (Dec.) 1959. 16. Grollman, A.: Monographs on Therapy 5:1 (Feb.) 1960.

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New Concept of Retirement Inaugurated in Brownsville Home

A new concept of retirement created for individuals with a record of public service in the field of medicine has been inaugurated at the Luearlam Manor in Brownsville, Texas.

The Manor is a non-profit retirement home located in the semitropics on the border of Old Mexico, near the Gulf. It differs from most retirement homes in that it seeks to provide a haven in later years primarily for those individuals whose life has been marked by a high degree of public service to their trade or profession, but who have reached retirement age with insufficient savings to maintain the standard of living enjoyed throughout their working career.

Luearlam Manor was built from an idea conceived by the late Earl Corder Sams, president and chairman of the board of the J. C. Penney Company. Funds which he left the Sams Foundation in Brownsville provided a number of public benefits, among them the Luearlam Manor. The Manor is neither a charity home nor a nursing home. On the nonprofit basis, accommodations range from $135 per month to $185 per month for private quarters and fine food in the luxuriously furnished and gracefully landscaped single-story building. Revenues go back into operations.

Complete Facilities

Facilities include complete installations for hobbies, crafts and the arts, private dining rooms, community hall and library, individual snackbars and kitchens, and in general, the accoutrements of gracious living with as much participation in the community life of the Manor as desired by the individual.

The person eligible for the Manor is not "typed." The hope is for a self-contained group of creative people still active in retirement and functioning as a dynamic civic force in the community or area. The Manor is administered by the Sisters of Mercy, who also operate the adjoining Mercy Hospital in Brownsville. The Manor itself is non-sectarian and open to all who otherwise qualify. It is not a religious retreat.

Financial arrangements made with guests are also somewhat different from most homes. Entry is on a mutually acceptable basis after a three month trial. No property entailment, financial pledges or endowments are asked, and the individual retains complete freedom of action. The home is open to single men and women and married couples, with special private apartments to cover all circumstances.

The home has been open for some time on a trial basis, but active invitation to interested parties was begun only this year. Those interested in investigating the home can do so by writing directly to Luearlam Manor, Box B, Brownsville, Texas. All inquiries are personally answered and all correspondence is completely confidential.

Dr. Jenness of Texas Western Publishes Volume of Poetry

Franklin B. Jenness, M.D., director emeritus of the student health service of Texas Western College of El Paso, is the author of a new book of poems entitled "Spindrift and Sagebrush" soon to be released by the Naylor Co. of San Antonio.

Dr. Jenness had previously published three volumes of poetry, "Man O' War Rhymes," "Sea Lanes," and "Ocean Haunts." Many of his poems have been printed in anthologies and in publications throughout the nation.

SOUTHWESTERN MEDICINE has published several scientific papers of which Dr. Jenness was the author.

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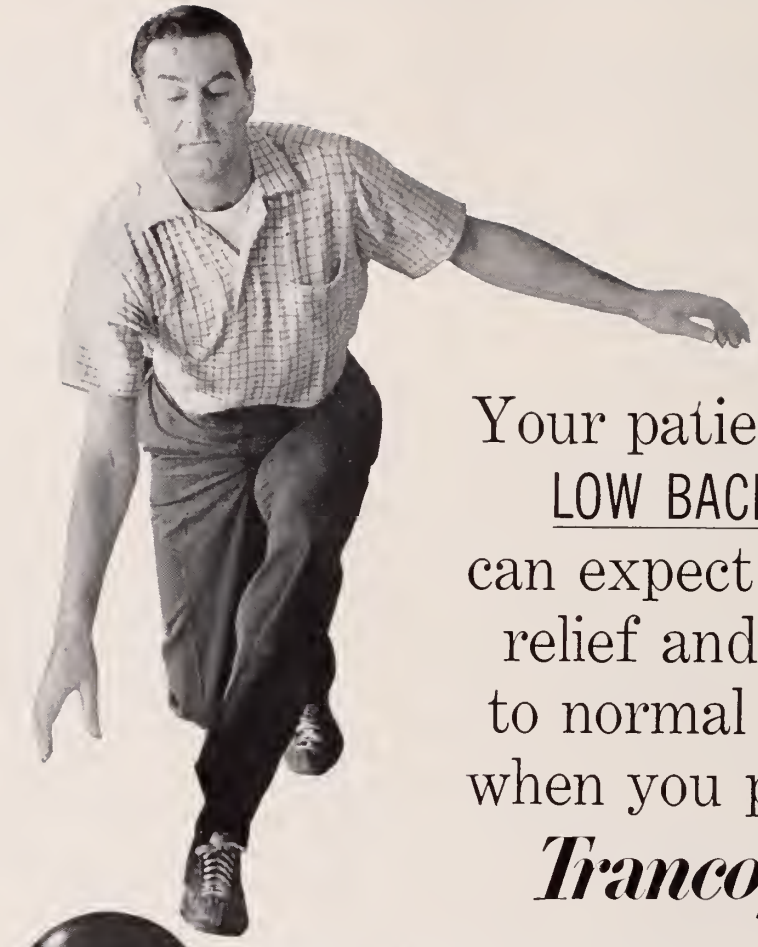
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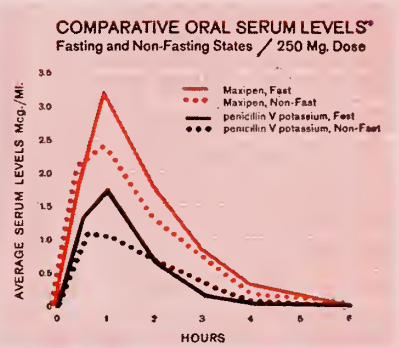
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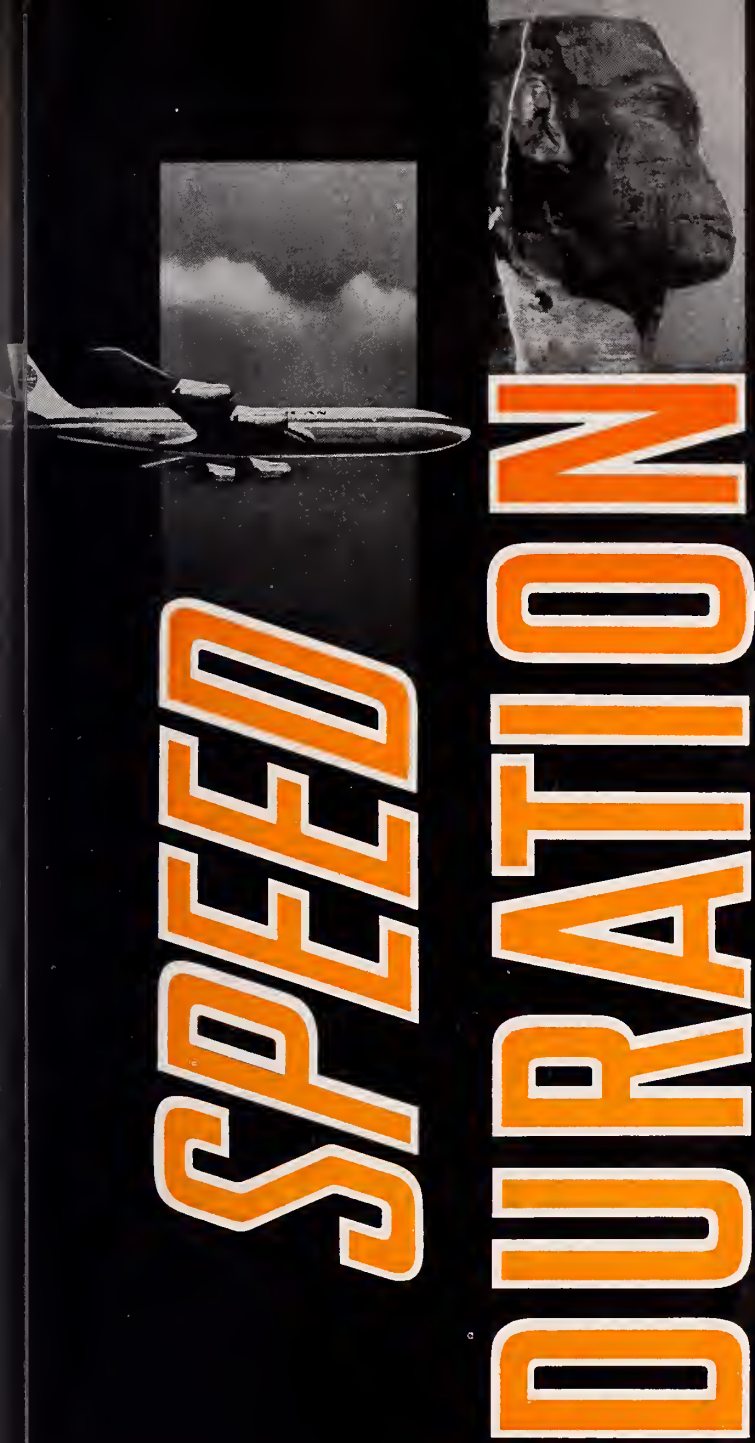
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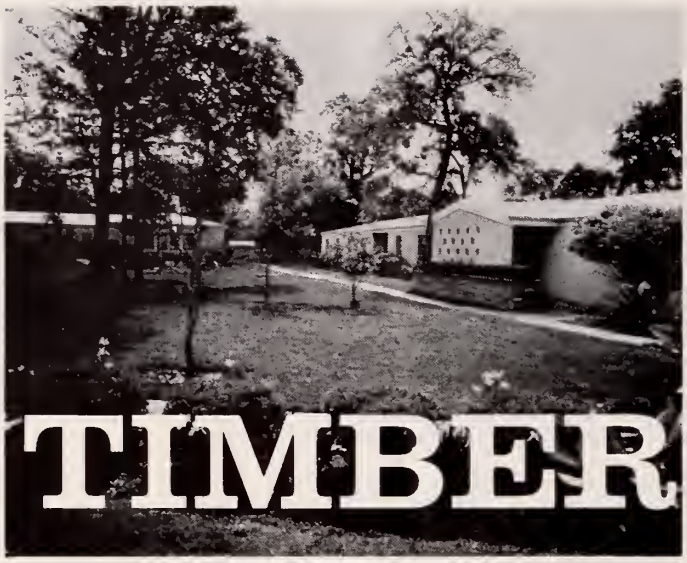
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1. Cook, J.E., Briggs, G.W., and Hindley, F.W.: Chronic Amebiasis and the Need for a Diagnostic Profile, Am. Pract. and Dig. of Treat. *6*:1821 (Dec., 1955).

2. Rinehart, R.E., and Marcus, H.: Incidence of Amebiasis in Healthy Individuals, Clinic Patients and Those with Rheumatoid Arthritis, Northwest Med., *54*:708 (July, 1955).

3. Webster, B.H.: Amebiasis, a Disease of Multiple Manifestations, Am. Pract. and Dig. of Treat. *9*:897 (June, 1958).

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1. Smylie, H. G.; Webster, C. U., and Bruce, M. L.: *Brit. M. J.* 2:606, Oct. 3, 1959. 2. Hodges, F. T.: *GP* 14:86, Nov., 1956.

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1. Eisen, H. N., and Tabachnick, M.: Protein Metabolism, M. Clin. North America 39:863 (May) 1955. 2. Jamisan, R. M.: General Nutritive Deficiency, Virginia M. Month. 83:67 (Feb.) 1956. 3. Galdfarb, A. F.; Napp, E. E.; Stane, M. L.; Zuckerman, M. B., and Siman, J.: The Anabolic Effects of Norethandralane, a 19-Nortestasterone Derivative, Obst. & Gynec. 11:454 (April) 1958. 4. Batsan, R.: Investigator's Report, Feb. 11, 1956. 5. Weston, R. E.; Isaacs, M. C.; Rosenblum, R.; Gibbans, D. M., and Grassman, J.: Metabolic Effects of an Anabolic Steraid, 17-Alpho-Ethyl-17-Hydraxy-Narandrastenone, in Human Subjects, J. Clin. Invest. 35:744 (June) 1956. 6. Brown, C. H.: The Treatment of Acute and Chronic Ulcerative Colitis, Am. Pract. & Digest Treat. 9:405 (March) 1958.

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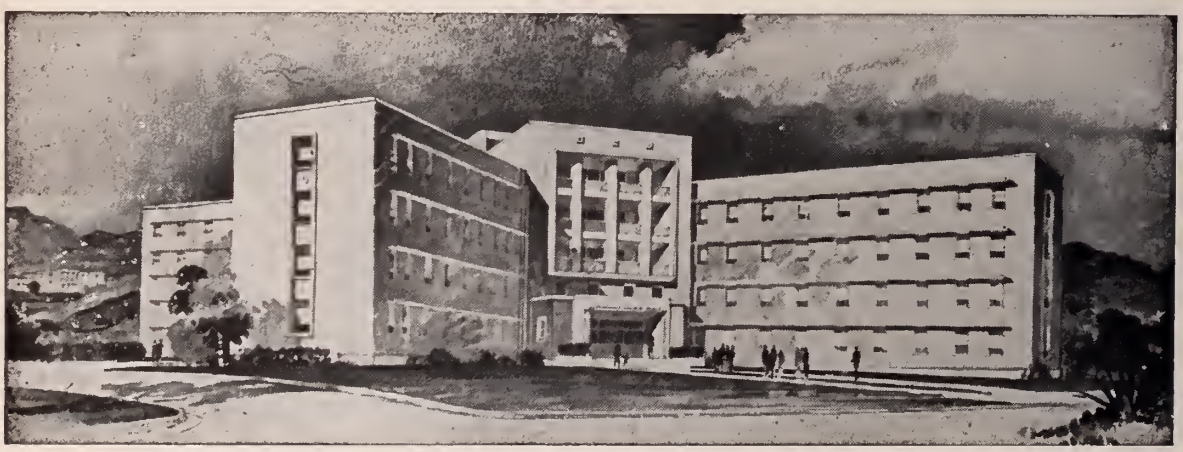
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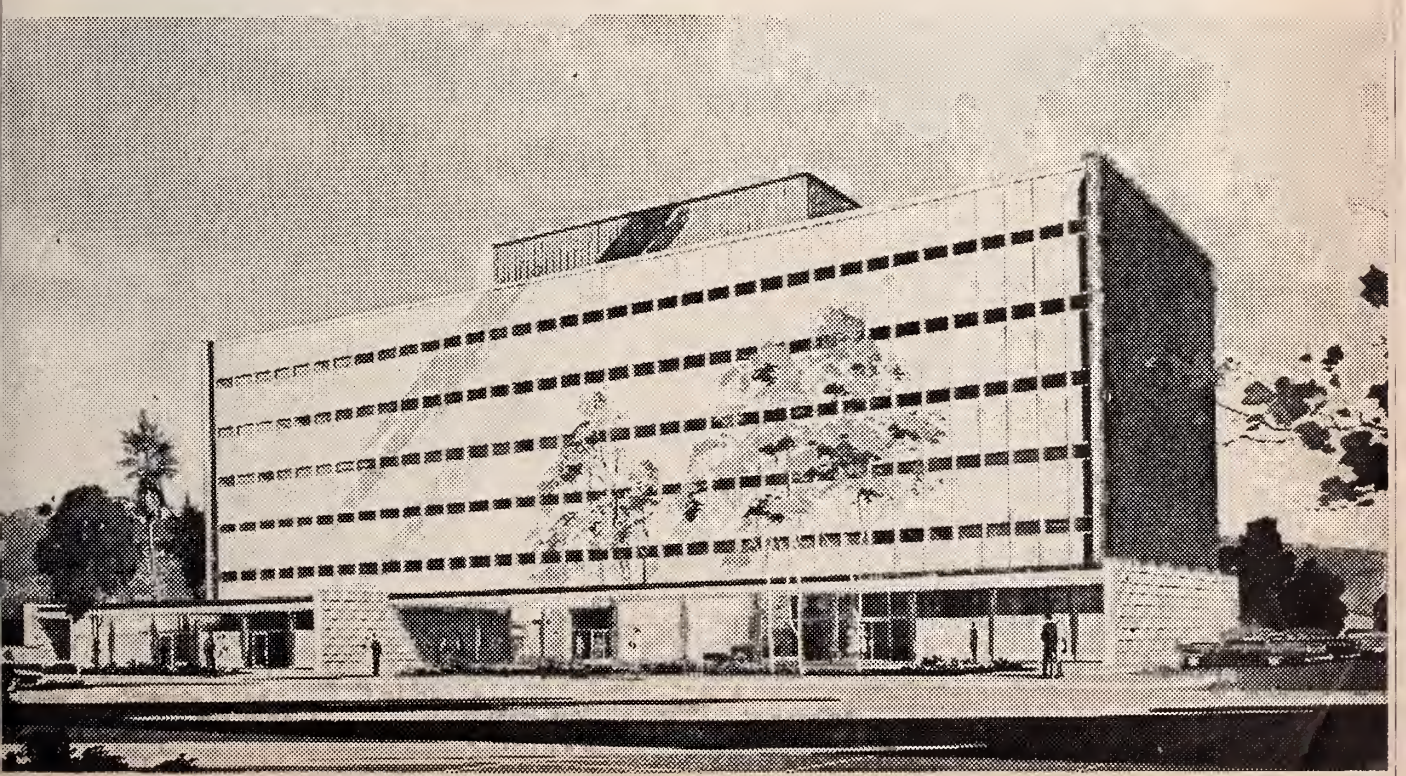
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1. Cook, J.E., Briggs, G.W., and Hindley, F.W.: Chronic Amebiasis and the Need for a Diagnostic Profile, Am. Pract. and Dig. of Treat. *6*:1821 (Dec., 1955).

2. Rinehart, R.E., and Marcus, H.: Incidence of Amebiasis in Healthy Individuals, Clinic Patients and Those with Rheumatoid Arthritis, Northwest Med., *54*:708 (July, 1955).

3. Webster, B.H.: Amebiasis, a Disease of Multiple Manifestations, Am. Pract. and Dig. of Treat. *9*:897 (June, 1958).

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1. Biegeleisen, H. I.: Clin. Med. 2:1005, 1955. 2. Roberts, J. T.: Clin. Med. 4:1375, 1957. ©1960, A.P. Co.

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COMING MEETINGS

Postgraduate Course, Dermatology for General Practitioners, University of Colorado Medical Center, Denver, July 14-16, 1960.

Postgraduate Medical Assembly of South Texas, Shamrock Hilton, Houston, July 18-20, 1960.

New Mexico Chapter, American Academy of General Practitioners, Summer Clinic, Ruidoso, N.M., July 18-20, 1960.

Northern Arizona Medical Seminar, Arizona State College, Flagstaff, Aug. 4-6, 1960.

Postgraduate Course in Pediatrics, University of Colorado School of Medicine, The Stanley Hotel, Estes Park, Colorado, Sept. 1-6, 1960.

Southwestern Medical Association, 42nd Annual Meeting, Hotel Hilton, El Paso, Oct. 20-22, 1960.

Symposium, "Medical and Biological Aspects of Energies of Space," Hilton Hotel, San Antonio, Oct. 24-26, 1960, sponsored by Air Force School of Aviation, Brooks Air Force Base, Texas. Symposium coordinator, Jack Harmon, Southwest Research Institute, Box 2296, San Antonio 6, Texas.

Southwest Obstetrical and Gynecological Society, Annual Meeting, Riviera Hotel, Las Vegas, Nev., Nov. 7-8, 1960.

Medical Society of the United States and Mexico, Annual Meeting, Guadalajara, Nov. 8-10, and Mazatlan, Nov. 11-12, 1960.

Texas Orthopaedic Association, Galveston, Texas, April 24, 1961.

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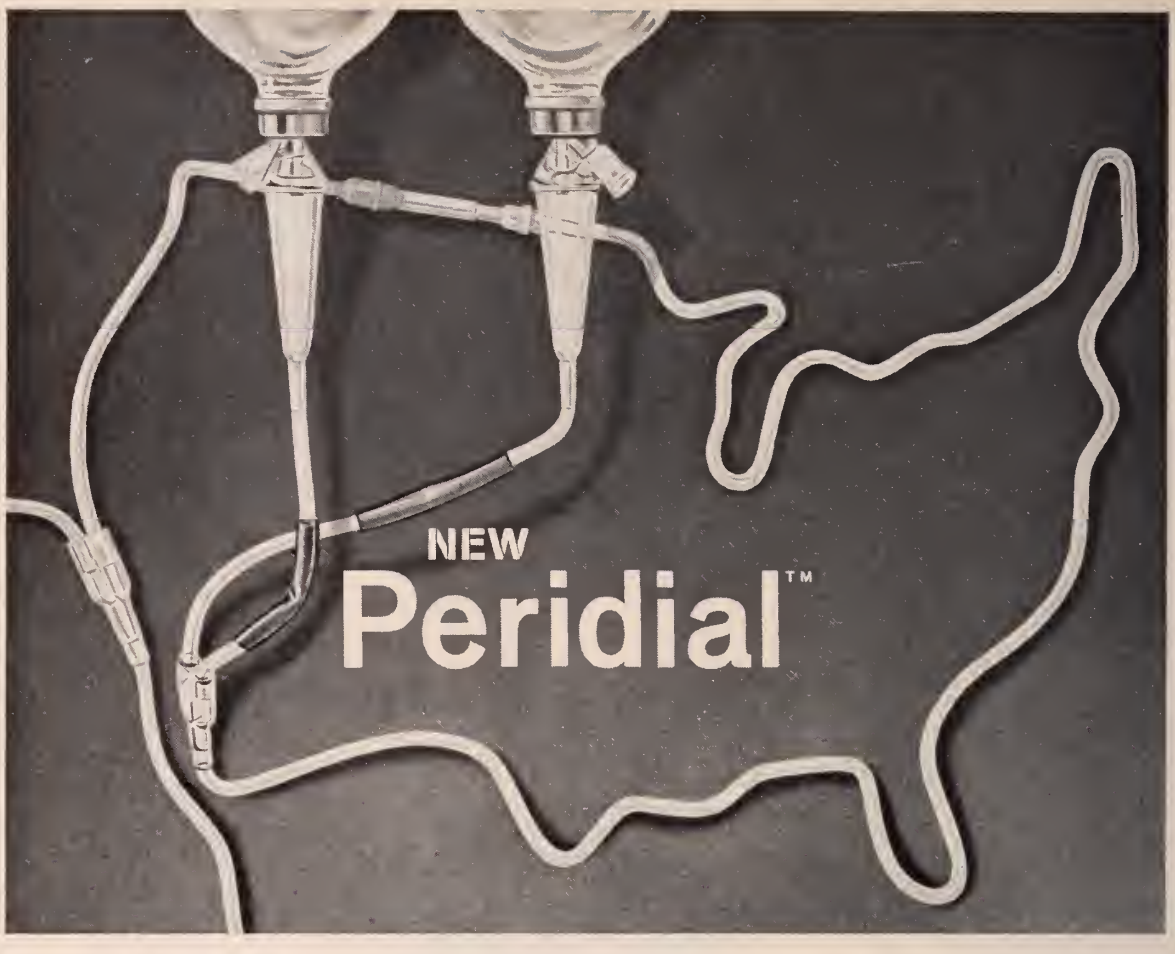
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*by metabolic conversion of lactate. pH adjusted to 5.6 with lactic acid.

†Maxwell, M. H., *et al.*: J.A.M.A. *170*:917, 1959.

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SOUTHWESTERN MEDICINE

VOL. XLI, NO. 7 JULY, 1960

EDITORIAL

Medical Education Milestone in New Mexico

By Jack Curry Redman, M.D., A.A.G.P., *Albuquerque*

On May 10, 1960, the New Mexico Medical Society at its annual meeting adopted a resolution which conceivably could trigger a nationwide change in medical education of inestimable value. The resolution was introduced by the New Mexico Chapter of the American Academy of General Practice, and consisted of two resolved portions:

(1) That the New Mexico Medical Society indicate its awareness of the need for producing well-trained physicians, including general practitioners, by our proposed medical school, as a prime reason for establishing such a school; and

(2) That the New Mexico Medical Society recommend the establishment of a Chair of General Practice on the faculty of the medical school.

Long-Awaited Dream

We in New Mexico are about to realize a long-awaited dream—the establishment of a medical school at our University of New Mexico. The recent House of Delegates considered reports and resolutions pertaining to the medical school, and the one quoted above was among those adopted.* It was felt to be especially indicated at this critical time in our medical lives, by specialists and general practitioners alike.

We are all confronted by the everpresent threat of socialistic inroads in medicine, and in every other phase of our daily lives. Forand-type legislation hangs over our heads like a blanket, which, if we do not fight with everything in us, will one day drop upon us all. "Fight" does not mean "object to" or "deny" alone. It means personal and group re-evaluation and re-appraisal in terms of providing something better than the oblivion of socialism. It means improved public relations. It means spiritual rededication, and the re-equation of the priceless privileges which are ours as Americans.

Rumblings of People

Listen to the people now, talking about our profession. Have you heard rumblings about "overspecialization"; about the shortage of G.P.'s; about the cost of medical care; about the depersonalization of the patient? I have. What are we to do about these things? Do we just listen, but go on our ways because we are too busy? Do we join the complainers by fomenting discontent between

*The House of Delegates also passed a resolution approving a two-year medical school at the University of New Mexico and went on record in favor of establishment of a four-year medical school as soon as is reasonable.

groups in our wonderful profession? Do we heap restrictions upon our contemporaries, thus broadening the gulf in intra-physician relations? Or do we deal directly with the complaints personally, and with compassion for everyone?

The need for many more well-trained family physicians, G.P.'s, is self-evident. The foundation of the American Academy of General Practice was undoubtedly the most significant step in providing capable, up-to-date, well-trained G.P.'s. This organization now has more than 26,000 members, and its beneficial impact on American Medicine is in daily evidence, and it will continue to increase. The 1960 Congress of Delegates of the A.A.G.P. took a far-sighted step recently in Philadelphia by approving a resolution which, after 1966, will require two years of post-graduate training as one of the membership requirements of the Academy.

Disproportionate Ratio

The need for well-trained specialists is also self-evident, and will always be so. Are we not, however, condoning a dangerous situation when we fail to do anything about the disproportionate specialist: G.P. ratio? Is there not a dangerous degree of iatrogenic depersonalization of Medicine because of this disproportionate ratio?

We advise our patients that they should have a family doctor—one who can care for most of their ills, yet who knows when to refer to a specialist. Who is this family doctor? He is the one who takes care of the whole family — the G.P. A.A.G.P. membership is now recognized as a very valuable indication of the family doctor's continuing and increasing proficiency through the Academy's continuing postgraduate training requirements.

Other End of Scale

What of the other end of the educational scale of General Practitioners? Why not stimulate actively more medical students to enter general practice? This could be accomplished and, once undertaken, such a program would go a long way toward solving a very serious problem in Medicine today. This is not to infer that we should stop stimulating the desire for specialization. Far from it! What it does infer is this: we need more general practitioners, and their production should start actively in medical school.

The most logical way of coordinating such a training program is to have a general practitioner (and A.A.G.P. member) on the faculty of each medical school. This man would be invaluable in helping to plan curriculum; in administrative liaison between general practice and the specialties; in stimulating interest in general practice; and in working with the entire faculty toward the goal of training the most competent physicians possible.

Singular Opportunity

Thus, in New Mexico, our opportunity is singular. We have recommended the establishment of a medical school, and we have recommended the establishment of a Chair of General Practice on the faculty. This will be the first such Chair in a medical school in the United States, and it is our fondest hope that this positive step, this medical education milestone, may be reduplicated by other schools across our country to the benefit of American Medicine and the people we serve.

114 Oak Street, N. E.

Northern Arizona Medical Seminar Scheduled in Flagstaff August 4-6

The second annual Northern Arizona Medical Seminar will be held at Flagstaff, Arizona, at the Arizona State College Aug. 4-6. A. A. G. P. credit will be given. Activities for the entire family are planned for this three-day meeting in the heart of northern Arizona's summer vacation playground.

Speakers will be Dr. E. C. Beatty, Jr., Department of Hematology, The Children's Hospital, Denver; Dr. Vincent P. Collins, Professor of Radiology, Baylor University, Houston; Dr. Robert Kark, Professor of Medicine, University of Illinois, Chicago; Dr. Champ Lyons, Professor of Surgery, University of Alabama Medical Center, Birmingham, Alabama; Lt. Col. Eddy D. Palmer, Brooke General Hospital, Fort Sam Houston, Texas; and Dr. Ralph A. Reis, Professor of Obstetrics and Gynecology, Northwestern Medical School, Chicago.

Information on the meeting may be obtained from Dr. John F. Currin, 110 West Birch Avenue, Flagstaff, Arizona.

Dr. Haynes of Clovis Elected President of New Mexico Medical Society

Dr. Allan L. Haynes of Clovis was elected President of the New Mexico Medical Society at its 78th annual meeting in Albuquerque May 11-14.

Other new officers are Dr. William Badger, Hobbs, President-Elect; Dr. R. C. Derbyshire, Santa Fe, Vice-President; Dr. Earl L. Malone, Roswell, Delegate to the A. M. A.; Dr. Leland S. Evans, Las Cruces, Alternate Delegate; and Drs. John McCulloch, Farmington, George Prothro, Clovis, and Gerald Slusser, Artesia, Councillors for three years. Dr. Thomas L. Carr, Albuquerque, continues as Secretary-Treasurer for the second year of a two-year term. Dr. C. Pardue Bunch, Artesia, and Dr. Derbyshire were elected Speaker of the House of Delegates and Vice-Speaker, respectively.

Santa Fe was selected as site for the 1961 meeting.

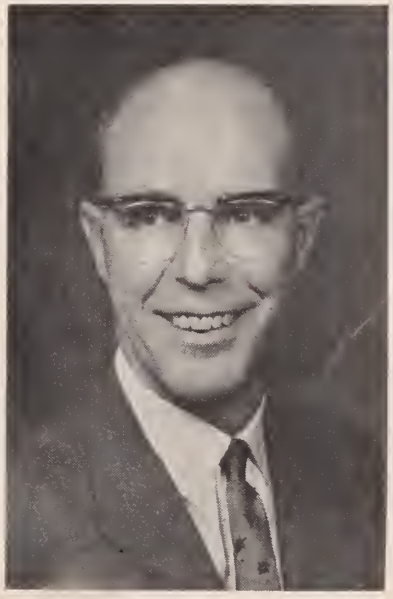
Dr. Lewis M. Overton, Albuquerque, retiring President, scored government medicine for failing to consider overall problems of the aged and "for not helping the aged to help themselves." He emphasized the importance of treating the patient as "a whole person."

"The New Look in Medical Practice"

Dr. R. B. Robins of Camden, Arkansas, trustee of the A. M. A., spoke on "The New Look in Medical Practice."

The House of Delegates passed a resolution approving a two-year medical school at the University of New Mexico and went on record in favor of establishment of a four-year medical school as soon as is reasonable. The House called for legislative support to provide funds for "a first-class medical institution."

A resolution recommended that every applicant for a vehicle license over the age of 70 be given a yearly medical screening examination as part



Dr. Haynes

of a driving test. The House suggested that .10 of one per cent blood alcohol or its equivalent be used as "prima facie evidence of driving while intoxicated."

The Society approved a new all-expense health insurance plan, which will become available July 10 to approximately 23,000 federal employes and their families in the state. The action paves the way for federal employes to participate in the health insurance plan authorized by the Federal Employes Health Benefit Act of 1959.

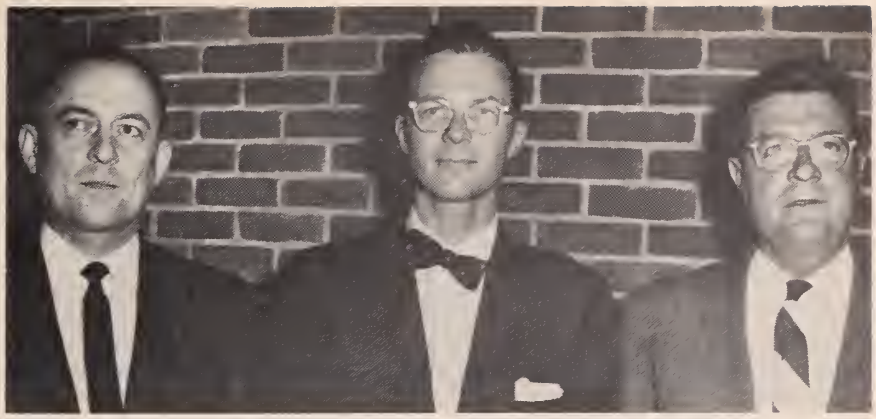
Statewide Plan

The statewide plan establishes a new Blue Shield service, which, with Blue Cross, provides federal employes with payments in full for physicians fees, hospital care and hospital costs. Prior to the action, there was no all-expense plan in New Mexico which met requirements of the U. S. Civil Service Commission, which is to administer the health insurance program for government employes. The all-expense plan is being established on two levels: first, for families with annual income of less than $6,000; and second, for families with an income of less than $4,000. Blue Cross and Blue Shield officials said they hoped to offer a similar all-expense plan to the public in New Mexico by the end of 1960.

The Society's new President, Dr. Haynes, was born in Morgantown, Ky., and received his M.D. from the University of Louisville School of Medi-



MEETING HEADQUARTERS — The Western Skies Hotel with its pleasant swimming pool and patio area served as headquarters for the 78th annual meeting of the New Mexico Society in Albuquerque, May 11-14.



NEW OFFICERS — Among new officers of the New Mexico Medical Society are, left to right, Dr. William Badger, Hobbs, President-Elect; Dr. Thomas L. Carr, Albuquerque, Secretary-Treasurer; and Dr. R. C. Derbyshire, Santa Fe, who was elected Vice-President as well as Vice-Speaker of the House of Delegates.

cine. He took his internship and residency at St. Joseph Infirmary in Louisville from 1938 to 1941. He then served a Fellowship in Surgery at the Mayo Foundation. He entered the Army in 1942 and served for three and one-half years in the Southwest Pacific, emerging in 1946 with the rank of Major. He was with the Mayo Clinic and Foundation from 1946 to 1951 and received his M.S. in Surgery at the University of Minnesota Graduate School. He began the private practice of medicine as a surgeon in Clovis in 1951.

Fellow in College of Surgeons

Dr. Haynes is a Fellow in the American College of Surgeons and is certified by the American Board of Surgery. He is a member of the Southwest Surgical Congress, a trustee of the New Mexico Physicians Service, a member of the state medical society's legislative committee, and chairman of the society's Public Health Committee and the Department of Public Welfare Committee. He is Past President and Past Secretary of the Curry-Roosevelt County Medical Society and a member of the board of directors of the Curry County Chapter of the American Cancer Society. He and Mrs. Haynes have two sons and two daughters, Allan L., Jr., 13; Miriam, 11; Stephen, 10, and Kathleen, 7.

AUXILIARY OFFICERS — New officers elected at the annual meeting of the Women's Auxiliary of the New Mexico Medical Society in Albuquerque are, left to right, Mrs. Chester Bynum, Farmington, corresponding secretary; Mrs. Randolph Seligman, Albuquerque, recording secretary; Mrs. Avon Flaniken, Farmington, president; Mrs. Alvin Hartz, Farmington, treasurer; and Mrs. Stanley Leland, Santa Fe, president-elect. Not shown are Mrs. Frederick Brown, Roswell, first vice-president; and Mrs. T. J. Glenn, Farwell, second vice-president. Mrs. Martin B. Goodwin of Clovis was the retiring president.



ORIGINAL ARTICLES

Complete Heart Block with Stokes-Adams Seizures
A Therapeutic Problem

By Saul Baer Appel, M.D., and
E. S. Crossett, M.D., *El Paso*

Until recently the treatment of complete atrioventricular dissociation with Stokes-Adams seizures was limited to sympathomimetic drugs. Isoproterenol (Isuprel) has been especially successful.[1] Molar sodium lactate has helped in some patients.[2] The external electric pacemaker has proved invaluable both in temporary and long term stimulus.[3] Disregarding its inconvenience the prolonged application of external electrical stimuli may produce local burns at the electrode site and is a considerable nuisance because of muscular contractions. The internal myocardial electrode is more easily tolerated especially if attached to a pocket-sized transistorized pacemaker.[4]

Case Report:

This 66-year-old white man was admitted to Providence Memorial Hospital on 9 January 1959 complaining of blacking-out spells and slow heart beat since 17 December 1958. He would notice a weak feeling shortly before blacking-out, would appear pale, his eyes would "pop", and he would shake "all over." The spell would last for seconds to several minutes and be relieved spontaneously resting in bed. No relation to position, food intake, exertion or time of day was noted. There was no diaphoresis, tongue biting or incontinence. Occasionally he experienced only a weak, dizzy sensation.

On 4 December 1958 he fainted while standing at work. The pulse rate was between 40 and 48. He soon felt better and was sent home. Later that day he was hospitalized because of confusion, aphasia and weakness of the left upper extremity. An electrocardiogram disclosed normal sinus rhythm at a rate of 60; P-R interval 0.20 and QRS interval of 0.16 seconds; complete left bundle branch block. He rapidly improved in the next 24 hours with no residual motor weakness. A repeat electrocardiogram on 6 December 1958 displayed no change except that the heart rate was 70 per minute. His initial blood pressure was 180/90 and he received 1.25 mgm. Serpasil intramuscularly. He was discharged 6 December 1958.

The history of previous illnesses was unusually comprehensive but non-contributory except for the following. On 9 December 1953 in Indiana he was hospitalized for three weeks because of probable myocardial infarction. The electrocardiogram . . . "did not give a clear picture as to the infarction, however, it showed a definite pattern of bundle branch block with a left ventricular hypertrophy." According to the patient this hospitalization was the turning point in his life: from a strong steelworker to a chronically ill asthmatic cardiac. His blood pressure was "low" and responded to several ounces of wine daily. Cortisone and Isuprel helped relieve the asthma.

Digitalis was prescribed and taken daily until 1959. A salt poor diet was initially prescribed because of steroid therapy and continued until 1959. He was allergic to bananas, chocolate, penicillin, codeine, demerol and morphine. He was finally advised to move to a warmer dry climate and settled in New Mexico in March 1954.

An electrocardiogram in February 1956 displayed sinus arrhythmia; rate was 80; P-R and QRS intervals 0.20 and 0.14 seconds respectively, complete left bundle branch block (Figure 1).

From 22 November to 14 December 1957 he

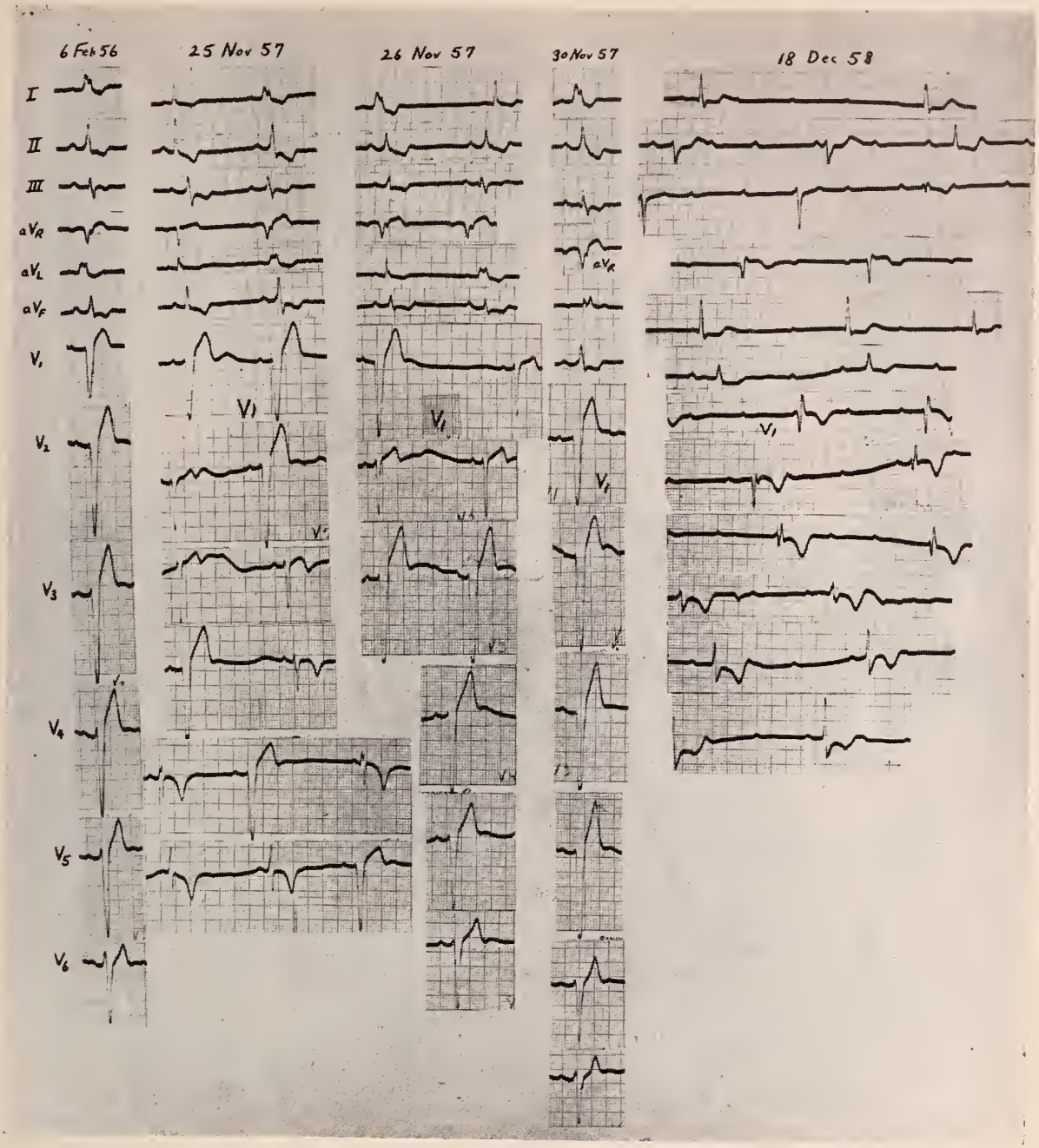


Figure 1
See text for description.

was hospitalized because of substernal pain radiating to the left arm for 12 hours. On 25 November (Figure 1): sinus arrhythmia and bradycardia, rate equals 55; P-R 0.20 seconds, QRS varied with intraventricular complexes of 0.08 and 0.16 seconds (left bundle branch block); T waves were inverted in leads V2, V3, V4, V5 and V6 during normal intraventricular conduction. On 26 November the record was essentially the same: rate of 50, P-R 0.20, QRS 0.10 and 0.16. On 30 November the rate was 65, P-R 0.22, QRS 0.16, complete left bundle branch block. On 9 December there was no change. X-ray disclosed a further increase in the transverse diameter of the heart compared to 1954 and 1956.

The patient gradually resumed part work and

was essentially asymptomatic. An electrocardiogram on 22 January 1958 disclosed sinus bradycardia rate 55, P-R 0.22, QRS 0.15. Extra lead V7 displayed a broad notched R wave of 13 mm. with intrinsicoid deflection time of 0.11 seconds and general configuration resembling leads aVL and I.

Physical Examination:

Patient was a weak sthenic elderly white male with pallor of the skin in no distress. Blood pressure 160/60. Pulse 32 per minute and regular. Respirations 24 per minute. Ocular fundi normal.

Neck veins were flat. Lungs were entirely clear.

Heart was enlarged to the left on percussion. A moderately loud grade 3/6 apical and aortic systolic blowing murmur was not transmitted to the neck. No diastolic murmurs. Aortic second sound was louder than pulmonic.

Abdomen negative except for several healed old incisional scars. No clubbing, cyanosis or edema. Neurological examination normal.

Laboratory:

Kahn and Kolmer negative. Periodic blood counts, urinalyses, and electrolyte determinations were essentially normal. Total cholesterol was 165 mgm.%. The blood urea nitrogen ranged from 36 to 25 mgm.% during the first 54 hospital days. On the 65th day it was 18 and on the 78th, 14 mgm.%. Blood calcium, phosphorus and protein bound iodine were normal.

Electroencephalograms on 26 January and 23 February were within normal limits: the former E.E.G. displayed a heart rate of 30; the latter rate was 75. Chest X-rays displayed slight left ventricular hypertrophy with sclerosis and prominence of the aortic knob.

Course in Providence Memorial Hospital:

On the first day 9 January 59 Raudixin and Crystodigin were discontinued. Isuprel 10 mgm. sublingual was given every six hours. Pulse varied between 36 to 24 and blood pressure from 210/84 to 100/60 mm. of mercury. The next day he had a "blackout" when the rate decreased to sixteen from forty-two. The sublingual Isuprel was altered to 120 mgm. daily in divided doses and intramuscular additional doses as necessary. Decadron 6.0 mgm. daily in divided doses was added. Subcutaneous epinephrine 1:1000 was ineffectual in 0.5 cc. doses.

During the first five days he had a weak, dizzy spell or "blackout" when the heart rate dropped to 18 or 16. Despite increasing the sublingual Isuprel to 30 mgm. every 3 hours eight to ten Isuprel injections were necessary daily. Oral ephedrine sulfate was gradually increased from 240 to 810 mgm. daily by the 17th hospital day, yet this medication failed to prevent reduction in heart rate and blackouts. Isuprel was also administered in a "mistometer" as used with acute bronchial asthma but failed to provide predictable increments in heart rate and tended to dry his mucous membranes.

Probanthine 15 mgm. every six hours produced no effect. On the 12th day digitoxin was begun: a total of 1.2 mgm. in two days produced anorexia, diarrhea and nausea but no pulse increment (31 to 18).

On the 18th day sublingual Isuprel was increased from 30 to 45 mgm. every three hours but the pulse ranged from 34 to 15. On the 22nd day after several blackouts with pulse ranging from 22 to 17 the previous oral medications were discontinued. Intravenous Isuprel infusion was begun: five to 20 ampoules (1 to 4 mgm.) per liter 5 per cent glucose in water at 24 to eight drops per minute. The heart rate rose rapidly and ranged between 34 to 28.

Paredrine hydrobromide up to 320 mgm. daily was added orally without effect. Then barium chloride 160 mgm. daily was tried unsuccessfully.

On the 25th hospital day an attempt was made to wean him from the intravenous Isuprel infusion and substitute sublingual Isuprel. However, the heart rate dropped from 36 to 17 and the intravenous infusion was reinstituted. Intramuscular ACTH-AR gel was begun daily: 80, 60, 40, 30 and 20 mgm., each for three consecutive days. This appeared to improve his spirits, appetite and weight but not to affect the complete A-V block or blackouts.

The infusions containing five ampoules (one mgm.) Isuprel in 500 cc. 5 per cent glucose in water were most effective. The patient was able to get out of bed at will, walk to the toilet and sit in an armchair while the infusion slowly dripped. The heart rate ranged between 46 and 15 up to the 33rd day. When the sublingual Isuprel was increased to 60 mgm. every three

hours, the Isuprel infusion was slowed to two drops per minute; the patient's heart rate promptly fell to 17 and 16 with concommitant angina pectoris, brief syncope and slight convulsive seizure. Therefore the Isuprel infusion was maintained. On the 36th day the heart rate ranged from 74 to 21 and two blackouts occurred.

Finally on the 40th hospital day (63rd day of complete heart block) one electrode of the Medtronic transistorized pacemaker was attached via catheter passed through the right brachial vein into the right ventricle. The other electrode was imbedded in the left precordial subcutaneous tissue. At three milli-amperes with rate set around 70 the pulse rate varied from 66 to 58. The next day after intravenous Isuprel was discontinued he sustained two blackouts. An electrocardiogram on the 43rd day (Figure 2) displayed occasional failure of the pacemaker to stimulate ventricular depolarization. After increasing to 20 milliamps the pacemaker maintained the rate between 69 and 62, 67 and 63, and 67 and 60 during the next three days. On the 48th hospital day an inflammation was noted at the site of the intravenous catheter.

On the 49th hospital day he began a regular instead of the salt free diet. His weight was 126.5 lbs. On the 51st day a thoracotomy was performed (by E.S.C.) resecting two costal cartilages in order to insert the pacemaker wire directly into the myocardium of the right ventricle. For two more days the heart rate was stable in the sixties. On the 54th day there was a sudden decrease in pulse rate from 66 to 45 and it was discovered that the milliamp setting had accidentally been turned down. On the next day there were four blackouts with heart rate ranging from 64 to 32. On the 56th day the pulse rate continued to fluctuate widely (ranging from 80 to 33) and the patient had dizzy spells plus five blackouts. Even increasing the milliamp dial to 40 and the rate dial to 80 failed to produce more than an irregular pulse in the fifties. Therefore, intravenous

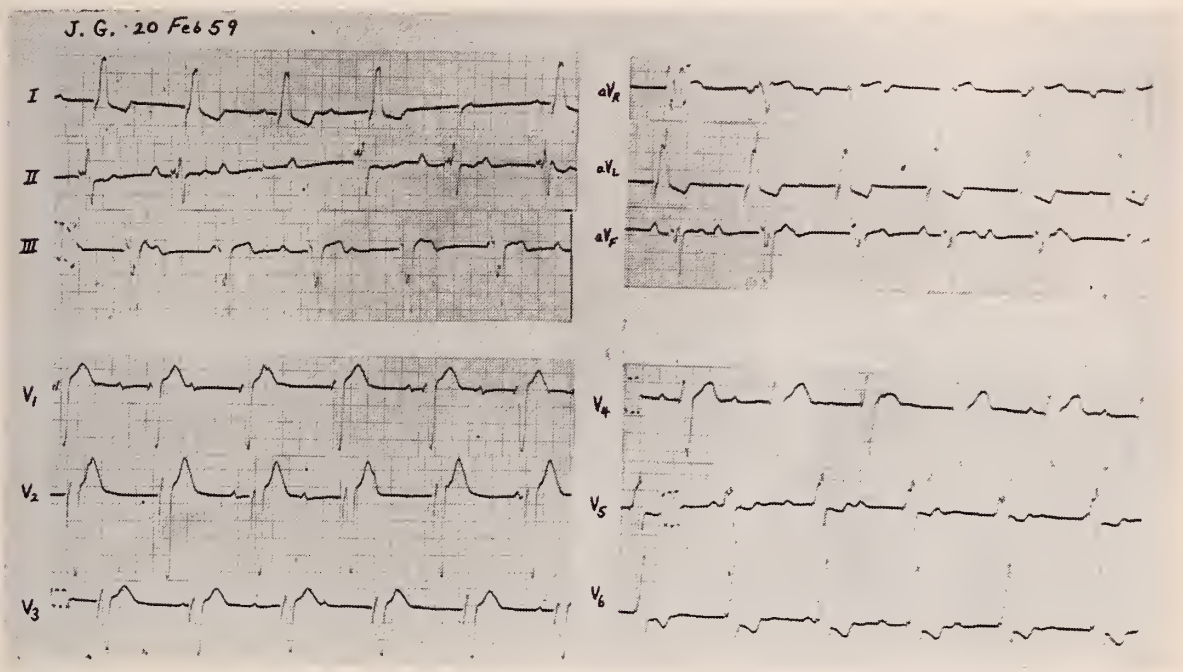


Figure 2

Forty-third hospital day. The rapid spike immediately preceding QRS represents Medtronic transistorized pacemaker stimulus. The fifth spike in lead one and third spike in lead two failed to depolarize the right ventricle.

Isuprel was again infused. His weight was then 138.5 lbs.

On the 57th hospital day, a new electrode wire was secured to the right ventricle, again during thoracotomy under local anesthesia. There were many friable adhesions from the previous chest surgery and it was difficult to be certain of some tissue limits except by observing the electrocardiogram on a monitoring oscilloscope. Adequate stimuli administered to the myocardium produced immediate regular ventricular responses.

From the 58th through 61st hospital days the transistorized pacemaker apparently produced adequate stimuli with pulse ranging from 76 to 44, 78 to 63, 76 to 52 and 78 to 60. Clinical and radiologic signs of pericardial and left pleural effusions presented. Diuretics reduced the weight from 140 to 137.5 lbs. On the 62nd day an anterior pericardial tap disclosed 70 cc. of blood. The patient had felt dizzy and blacked out three times while the pulse varied from 80 to 33 (Figure 3). Accordingly intravenous Isuprel 1 mgm. per 500 cc. was infused for 12 hours. Sublingual Isuprel 15 mgm. was administered as necessary for pulse rate below 60. On the 63rd day the pulse ranged between 76 and 39; 64th day, 80 and 41; 65th day, 76 and 39; 66th day, 78 and 72; 67th day, 78 and 33.

On the 74th day the pacemaker dial for milliamps was adjusted to maximum without any predictable effect on the heart rate which fluctuated from 80 to 33. His weight was 144.5 lbs., and the patient displayed left pleural effusion and peripheral edema. Since sublingual Isuprel did not apparently augment the heart rate it was discontinued. 3.75 mgm. Lanoxin was given during next three days without effect.

On the 78th day the pacemaker wires were removed from the patient's chest. The intracardiac wire fell out immediately as it was pulled and apparently had been broken for some time (probably for 16 days). The heart rate ranged from 40 to 31 that day.

From the 80th to the 90th hospital days the patient was ambulatory without any blackout despite a heart rate ranging from 43 to 32. He had

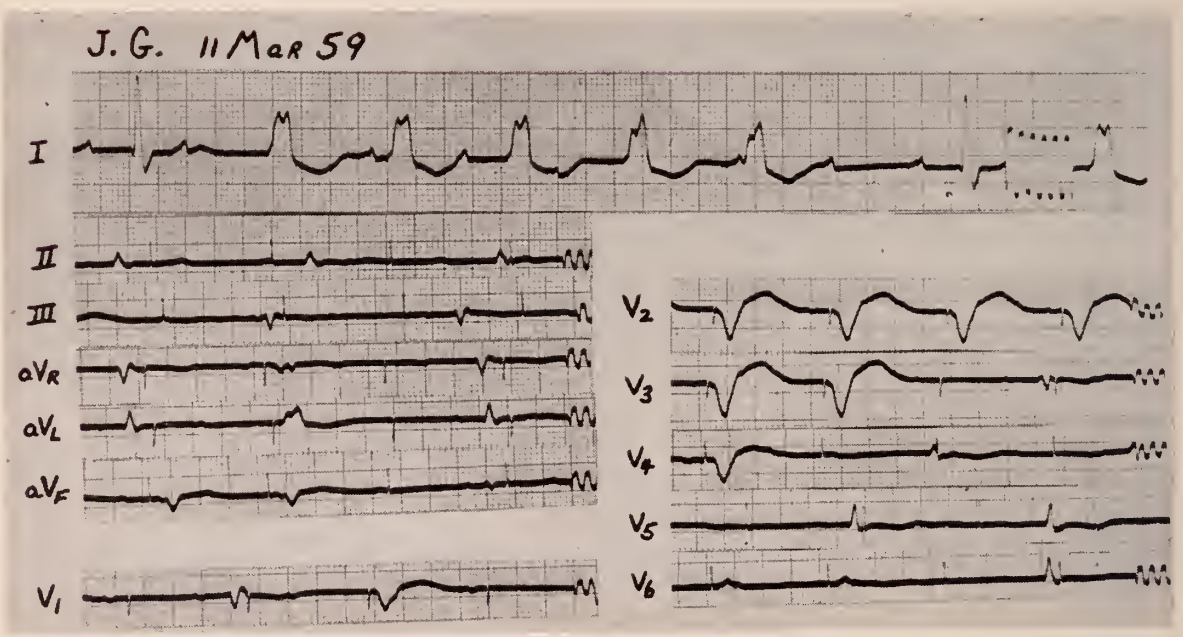


Figure 3

Sixty-second hospital day. No pacemaker spike visible in lead one. EKG sensitivity had to be reduced markedly in all the other leads. Note occasional spike-QRS sequence in leads V1, V3 and V4 and regular sequence in V2. Other leads display both complete A-V dissociation as well as "Pacemaker-Patient Dissociation."

no blackout after the 63rd hospital day and had taken no Isuprel since the 74th day. The left pleural and pericardial effusions gradually resorbed. The edema disappeared and weight remained around 143 lbs. Blood pressure fluctuated between 164 and 112 systolic over 100 to 48 diastolic. He was discharged 8 April 59 on the 90th hospital day (113 days after the onset of blackout spells) on a regular diet, Lanoxin 0.25 mgm. daily, Hydrodiuril 50 mgm. daily and Cholarace t.i.d.

Following discharge from Providence Memorial Hospital the patient was treated by Dr. A. M. Babey who provided this followup. The pulse rate usually ranged from 40 to 44. He occasionally noticed light headedness promptly relieved by an extra 10 mgm. sublingual Isuprel tablet. During the last few weeks of life he insisted on mowing the lawn, clipping hedges and waxing floors. His medications were digitoxin 0.1 mgm. daily, low salt diet, Hydrodiuril 50 mgm. twice weekly, Cholarace three times daily and sublingual Isuprel 10 mgm. four to five times daily. His weight varied between 140 to 142 pounds. On 27 August 59 he fell to the floor sustaining a scalp laceration which did not bleed, presumably because of cardiac arrest or ventricular fibrillation.

Autopsy Report (Dr. Maynard S. Hart):

The significant gross findings were limited to the cardio-vascular system. The heart was enlarged weighing approximately 475 grams. The epicardium was smooth except for ancient patches of fibrinous adhesions anteriorly extending into the sulci. The valves were normal. The left ventricular myocardium measured up to 22 mm. thick. Brownish-gray poorly demarcated areas were noted in the anterior wall but no evidence of acute myocardial infarction was seen. Both the anterior and posterior coronary arteries displayed extreme atherosclerosis. There was no evidence of recent thrombosis, but the lumen was almost completely obliterated by atherosclerotic patches in different areas.

Microscopic sections displayed ancient myocardial infarction. Sections from the region of the atrioventricular node and Bundle of His displayed marked fibrosis. In many areas the muscle bundles were almost completely replaced by homogeneous acellular pink staining collagenous material. Trabeculations were exaggerated. The coronary arteries displayed extreme atherosclerosis.

Discussion:

The patient displayed intermittent left bundle branch block for five years and incomplete atrioventricular block for one year prior to the onset of complete atrio-ventricular dissociation with Stokes-Adams seizures.

He was treated with various oral, subcutaneous and intramuscular sympathomimetic drugs in huge doses without benefit. Corticotropin gel and dexamethasone failed to help.[5, 6] Intravenous Isuprel proved to be the most effective stimulant for his idioventricular center. However, this type of drug therapy was inconvenient and required continuous nursing supervision.

The transistorized pacemaker with signal about 20 milliamperes was remarkably effective. However, the patient shortly developed "pacemaker" as well as A-V dissociation (after about 5 days). It is probably unnecessary to perform a thoracotomy to insert a wire in these cases.[4]

Once the patient finally developed a fairly steady heart rate above 30 he had no further Stokes-Adams seizures and survived for five months without significant Isuprel or electrical stimuli.

We acknowledge the detailed data supplied by Doctor B. J. Wyland of Mishawaka, Indiana, and Doctor William D. Sedgwick of Las Cruces. We acknowledge the superlative nursing care rendered at Providence Memorial Hospital without which this report could not have developed.

1501 Arizona Ave.

Bibliography:

1. Nathanson, M. H., and Miller, H.: *Circulation, 6*:238, 1952.
2. Bellet, S., Wasserman, F., and Brody, J. I.: *Circulation, 12*:678, 1955.
3. Zoll, P. M., Linenthal, A. J. and Norman, L. R.: *Circulation, 9*:482, 1954.
4. Thevenet, A., Hodges, P. C., and Lillehei, C. W.: *Diseases of the Chest, 34*:621, 1958.
5. Litchfield, J. W., Manley, K. A., and Polak, A.: *Lancet, 1*:935, 1958.
6. Friedberg, C. K., Kahn, M., Schever, J., Bleifer, S. and Dack, S.: *Journal of the American Medical Association, 172*:1146, 1960.

Advantages of Triquin® in Long-term Management of Lupus Erythematosus: Illustrated Case Reports

By Paul L. Williams, M.D., *Seattle*

Synthetic antimalarial drugs have ultimately earned a position of increasing importance in the therapeutic regimen of certain skin diseases. One of the most common applications pertains to the suppression of cutaneous manifestations associated with chronic forms of lupus erythematosus. By and large, these compounds have come to replace older empirical medications, including the heavy metals. The latter have been extensively employed for many years in spite of inherent toxicity, with a paucicity of alternate choice, often administered with some degree of apprehension to both doctor and patient, at times leading to fatal complications.

The post-war recognition of quinacrine as an effective substitute opened an entirely new era of therapeutic approach. Subsequently, the introduction of similar analogs, namely chloroquine and hydroxychloroquine, found clinical acceptance as effective agents in treatment of lupus erythematosus. Although no claim for cure can be assigned to them, their potent anti-inflammatory action in the absence of any serious adverse reactions, comprise the basis for preference in this obscure disease.

Chemotherapeutic Agents

Until recently these chemotherapeutic agents were available as a choice of three single compounds, dispensed by the trade names Atabrine® (quinacrine), Aralen® (chloroquine), and Plaquenil® (hydroxychloroquine). Unfortunately, clinical experience has established that not all patients can tolerate the single drugs in optimum therapeutic dosage for the continuous, often prolonged, intervals required to obtain desired results. Side effects consisting of gastro-intestinal upsets, dizziness, disturbances of visual accommodation, skin rashes, etc., may at times demand diminished dosage or discontinuation of therapy. These symptoms usually subside rather promptly on withdrawal of the drug.

Three Antimalarials

In an effort to further minimize intolerance, and to enhance long-term administration, it appeared theoretically feasible to combine the three antimalarials in smaller amounts than conventionally employed. Two favorable clinical reports[1,2] regarding the use of this compound, referred to as APA 5533, indicated that one might expect more impressive results in lupus erythematosus than with any of the three drugs used singly.

Following the release of the compound, trade named Triquin,* other papers have attested to the value of the combination in the management of both chronic discoid and subacute systemic forms of the disease.

Each Triquin tablet contains approximately one-fourth the recognized usual maintenance dose of each antimalarial as recommended for lupus erythematosus, i.e. Atabrine HCL 25 mg., Aralen phosphate 65 mg., and Plaquenil sulfate 50 mg.

Two cases of interest wherein Triquin was used with success for L.E. follow:

Case I

D. B., age 28 years, white, male, employed as a mechanic, was first examined on 5/14/58 with classical findings of chronic discoid lupus erythematosus on the face of seven years duration. General health and nutrition remained excellent prior to and throughout the present illness. Examination showed well circumscribed, chronic lesions confined to the nasal bridge and left preauricular area. Routine laboratory tests revealed no abnormalities. Serology negative. No. L.E. cells were demonstrated in the peripheral blood. Photographs were taken at this visit (Case I-A), Triquin was prescribed on an initial dose of one tablet t.i.d. p.c. Two subsequent visits during the month of June, 1958, showed progressive healing of all lesions. There were no complaints suggesting untoward effects from ingestion of the medication.

By 7/2/58 the condition had responded satis-

*The material used in this study was supplied by the Medical Research Department of Winthrop Laboratories.

factorily save for persistence of marginal erythema confined to the periphery of the well demarcated plaques. At this time he was taken off Triquin and placed on Aralen 250 mg. t.i.d. in the hope that this modification in his treatment regimen would accelerate healing to permit complete remission. On 7/16/58 the patient did show further clinical improvement in this regard. However, he reported he was unable to tolerate the prescribed Aralen due to side effects characterized by blurring of vision, mild dizziness and "faintness" occurring approximately 1-2 hours after taking the post-supper dose each evening. A re-check of the WBC count and differential revealed these findings to remain normal. Aralen then was discontinued and Triquin re-instituted on a dose level of two tablets t.i.d. p.c. A follow-up office visit during August, 1958, demonstrated no evidence of untoward symptoms.

Condition Quiescent

By 9/8/58 the condition appeared quiescent, showing only the characteristic atrophic scarring of healed, chronic L.E. (see photo Case I-B). The medication was then reduced to one tablet t.i.d. on a maintenance basis. On 10/7/58, the summer months having lapsed, Triquin was discontinued. Although he had been exposed to bright sun on repeated occasions during his period of treatment, no evidence of exacerbation or progress of the disease was observed at any time while the above systemic therapy prevailed.

On 12/9/58 the patient returned to the office complaining of re-activity of the lesions in situ manifested by recrudesence of erythema accompanied by mild local tenderness. Resumption of Triquin on the therapeutic schedule of two tablets t.i.d. was again instituted. Examination three weeks later (12/30/58) again showed definite clinical improvement. He was placed on a maintenance dose of six tablets daily which proved to be well tolerated. At his last visit on 2/9/59 his status improved with no adverse reactions from continuous medication.



A *B*

Case 1

Case II

Mrs. V. R., a 46-year-old white housewife, gave a past pertinent dermatologic history at her first office call. She gave the story of chronic, recurring skin trouble about the face off and on for several years, characterized by irregular patchy areas of dermatitis with erythema and scaling. These lesions were said to have resembled seborrheic eczema, but resisted conventional anti-seborrheic measures. She was not aware of acute flare-ups in relationship to solar exposure. Vague arthritic symptoms had been experienced in 1955 and a review of systems revealed X-ray knowledge of a chronic peptic ulcer, now clinically quiescent.

In May, 1958, during a recrudescent phase of her dermatitis, the patient was placed on Aralen (chloroquine) phosphate 250 mg. b.i.d. by her family physician. There was noticeable improvement in a short time. Later in the month it was necessary for her doctor to be away from the city, and she was instructed to keep in touch with this office.

Symptoms of Anorexia

On 6/18/58 she phoned to report she was experiencing symptoms of anorexia, nausea, "upset stomach," malaise, dull headache, and loss of six pounds weight since on the antimalarial regimen. An office visit on 6/21/58 confirmed the diagnosis of chronic discoid lupus erythematosus with classical features and distribution (see photo Case II-A). Routine laboratory studies were normal. Sedimentation rate was 25 mm/hr. (Westergren). A search of the peripheral blood for L.E. cells was negative.

At this time the previous medication was discontinued, and Triquin one tablet b.i.d. after breakfast and supper were substituted. This medication and dosage level proved consistently well tolerated. Examination of the patient on 8/13/58 showed the lesions in complete remission (see



A *B* *C*

Case II

photo Case II-B). In October, with termination of the sunny season, she discontinued the drug voluntarily without subsequent exacerbation. On 1/19/59 she returned for follow-up examination with no evidence of re-activity of her skin disorder (see photo Case II-C).

Conclusions

1. Triquin found to be therapeutically effective as a systemic medication for lupus erythematosus. It is particularly indicated for patients who do not tolerate the single antimalarial drugs in conventional doses of 125 mg.-250 mg. 2-3 times daily.
2. Benefit could be obtained in the optional range of six tablets daily. This dose was unattended by adverse effects even though administered continuously for many weeks. The fact that larger doses were not required may account for the excellent tolerance in our cases.
3. As a result of our experience with Triquin we consider it to be a welcome adjunct to the current therapeutic armamentarium for management of Lupus erythematosus.

Bibliography

1. Rein, C. R., and Fleischmajer, Raul (N.Y.C.): The treatment of lupus erythematosus and lymphocytic infiltration of the skin with A.P.A. 5533. Brit. J. Dermat. 69: 174, May 1957.
2. Tye, M. J., and others: Treatment of chronic lupus erythematosus; effectiveness of Plaquenil and A.P.A. (Aralen, 65 mg., Plaquenil, 50 mg., Atabrine 25 mg.) as compared with Aralen, with observations on side-reactions and toxicity; report and presentation of unusual cases. A.M.A. Arch Dermat. 77:454, April, 1958. (Soc. Report)
3. Robinson, Raymond C. V., and Smith, G. C.: Triquin in the treatment of discoid lupus erythematosus and light sensitive eruptions. Bull. Sch. Med. Univ. Maryland 43:97, Oct., 1958.
4. Schoch, E. P., Jr.: Antimalarial drugs in lupus erythematosus and light sensitive eruptions, Texas J. Med. 54:349, June, 1958.
5. Tye, M. J.; White, Herbert; Appel, Bernard, and Ansell, H. B.: Lupus erythematosus treated with a combination of quinacrine, hydroxychloroquine and chloroquine. New England J. Med. 260:63, Jan. 8, 1959.

Hotel Dieu Nursing School Needs Students, Financial Aid

The Nursing School at Hotel Dieu Sisters' Hospital is in a serious situation for two reasons: first, there is a shortage of applicants for each freshman class; second, the students, as well as the school, need financial aid.

It is hard to understand why at this time there are so few girls applying for nursing education. The shortage of graduate nurses is steadily increasing. Every doctor in the Southwest can help by trying to interest more girls in the study of nursing.

Physicians can also serve the Nursing School by giving financial aid in one way or another. The Nursing School operates at a loss, and it is impractical to lower the tuition. The school could teach another 50 girls without increasing the overhead appreciably since the teachers are already there. There is an urgent need for more students, but young women who are going to take nursing education frequently are hard put financially to see their way through school. It is quite important that financial help be given some members of each freshman class. This can be given to the nurse directly or contributions can be made to the Hotel Dieu School of Nursing Scholarship Fund.

L. W. B.

CPC

Clinical Pathological Conference

R. E. Thomason General Hospital, El Paso

Case No. 1327, May 19, 1960

F. P. Bornstein, M.D., *Editor*

Presentation of case by Jack Postlewaite, M.D.

History: Dr. Nathan Kleban.

A 21-year-old unmarried Latin-American hospital employee was admitted on August 18, 1959.

Vomiting of food on the afternoon of August 15 heralded the onset of this short fatal illness. Chills and fever of 103 followed. Sweating, normal temperature and comfort were induced by aspirin. This course of events was repeated on August 16 and 17, except for absence of vomiting on the 17th. When chills and fever recurred on August 18 the patient saw a doctor, who recommended hospitalization.

Pulmonary tuberculosis, cavitary, fibro-exudative, moderately advanced, right lung, confirmed by sputum culture, hospitalized the patient on the tuberculosis service from April 16 to August 13, 1956. Streptomycin, para-aminosalicylic acid, and isoniazid (INH) were administered. The patient was transferred for 8 additional months of treatment to a state sanatarium.

Physical Examination:

T. 105 P. 130 R. 24 B. P. 130/80 Except for a hot, dry skin there were no positive physical findings.

Hospital Course:

Initial treatment consisted of aspirin and a penicillin dihydrostreptomycin mixture. Chest conference concluded that the only residue of the old pulmonary tuberculosis was calcification in the left lung unrelated to the present illness. Acetyl Sulfisoxazole (Gantresin), chloramphenicol (Chloromycetin) and isoniazid were added to the penicillin dihydrostreptomycin but failed to affect fever or symptoms.

The attending physician detected an enlarged spleen, but no impressive lymph nodes. Significant leukopenia was noted on the seventh day. Total white blood cell count of 400 and platelet counts of 49,000 were reported later on two occasions.

Gastro-intestinal bleeding occurred, temperature rose to a high of 106.6. Quinine, chloroquine and neptatin (Mycostatin) were added to medications. Nausea and vomiting recurred. Whole blood transfusions, cyanocobalamin (B 12), folic acid, vitamin K, oxide, cortisone and hydrocortisone were given to no avail. The patient died on September 2, 1959.

Laboratory Findings:

Blood counts: 8-19-59—Hb. 13.4 gms., Ht. 40%, WBC 5,100, Segs., 57, Lymphs. 42; 8-21-59—Hb. 11.6 gms., Ht. 34, vol.%, WBC 5,200, Stabs. 1, Segs, 65, Lymphs. 34; 8-25-59—Hb. 10.7 gms., Ht. 32%, WBC 1,300, differential too few to count; 8-27-59—Hb. ?, Ht. 34%, WBC 1,205, differential too few to count; 8-31-59—Hb. 11.9 gms., Ht. 35, vol.%, WBC 400, baso. 2, Juveniles 3, Stabs. 11, Segs. 26, Lymphs. 55, Monos. 3, Platelets 49,000; 9-2-59—Hb. 8.9 gms., PCV 29%.

Urinalyses: 8-18-59—Amber, cloudy, acid, S.G. 1.015, Albumin 3+, sugar negative, WBC 10-15, RBC 1-4, ep. cells occ. squamous, many granular casts; 8-19-59—Amber, cloudy, acid, S. G. 1.017, Albumin 2+, sugar negative, WBC 2-4, RBC 2-4, occ. squam. ep. cells, few granular casts; 8-21-59—Amber, hazy, acid, S. G. 1.010, Albumin 2+, sugar negative, WBC 2-4, RBC 2-4, Occ. squamous ep. cells; 8-24-59—Yellow, clear, acid, S. G. 1.002, Albumin 1+, sugar negative, WBC 6-10,

RBC 3-4, few squamous ep. cells; 8-28-59—Amber, clear, acid, S. G. 1.020, Albumin 1+, sugar negative, WBC 2-4, RBC occ., occasional squamous ep. cells; 8-31-59—Amber, cloudy, acid, S. G. 1.015, Albumin 1+, Sugar negative, WBC 0-1/HPF, ep. cells rare squamous, 2-3 coarsely granular casts, loaded with motile bacteria.

Chemistry: 8-24-59 — Urea Nitrogen — 11.2; 8-28-59—Van den bergh Direct—.235, Indirect—.508.

Throat smear and culture and sensitivity—8-21-59—Strep. Sens. Kantrex, Erithro, Tetrac.; Coccidiodin, left arm, Histoplasmosis, right arm—8-24-59—Negative; Blood culture: 8-21-59—no growth; Blood culture: 8-25-59—no growth; Blood culture: 8-31-59—Preliminary report—gram-negative, short, thick rods, showing bipolar staining.

Blood for malaria parasites—negative—8-24-59—remarks: many monilia and cocci seen; Repeat malaria smear—8-27-59—no malaria parasites seen; Repeat malaria smear—8-29-59—negative; Febrile agglutinations—8-24-59—Typhoid O & H—negative; Paratyphoid A & B—negative; Brucella and proteus—negative. Repeat febrile agglutinations—8-31-59—negative.

Urine smear culture and sens.—8-24-59—no growth. Repeat urine culture and sens.—8-31-59—no growth. Repeat febrile agglutinations—8-27-59—negative. Blood culture for fungus and bacteria—8-31-59—no growth. Heterophile antibody — 8-28-59 — negative. Sed. rate — 8-22-59 — 4 mm./60 min.

Spinal fluid—8-28-59—sugar 68 mg.%., total protein—19.5 mg.%. Stool culture—8-31-59—Negative for yeasts—no growth for enteric pathogen—remarks: many staph. colonies were grown. Chest X-ray: 8-19-59—Negative for evidence of active pulmonary infection or congestive failure. EKG—8-28-59—First degree A-V block — ? RVH.

Clinical Discussion: Dr. Jack Postlewaite:

In evaluation of a patient one takes all the clues possible. I learned from the chart that this sexless being is a young Spanish-American male about 21 years old. When this patient was admitted the spleen was not palpable, or at least was thought not to be. There only was an acute febrile disease following upper respiratory infection. The out-patient records indicate that a recurrent pharyngitis was found in this patient. Several months before streptococci were found on laboratory examination and there is also a past history of tuberculosis.

In the beginning there was moderate fever which subsided in the first week. This suggested that the patient responded to whatever therapy, perhaps antibiotics, were involved. However, if you watch the blood count, pancytopenia, one with red, white count and platelets all going down, it becomes obvious that the response was only from the clinical standpoint and not from the laboratory study. The second week showed a hectic septicemia, fever, in a patient who dies with a fever of 106 with a febrile process. The spleen became palpable during the rounds in the second week and the question arises should a splenectomy have been done, in view of the pancytopenia.

X-Ray Discussion: Dr. Vincent Ravel:

We have here the original film that was taken in 1956 showing the moderately advanced fibroexudative lesion on the left with changes consistent with cavitation. The next film is approximately four years later, on admission. It shows the stable calcifications of the left and no evidence of any active pulmonary infection or congestive failure. The remaining films show approximately the same situation. As far as the enlarged spleen is concerned, there is no elevation of the left hemidiaphragm and nothing on the chest film that would make one suspect enlargement or a mass in the left upper quadrant. The mediastinum looks all right.

Dr. Postlewaite:

The first illness, with many sputa and cultures, was obviously tuberculosis. Although the family is from California, the coccidioidin test is negative. Histoplasmosis was negative, so we shouldn't be dealing with complications of this illness five years later. The approaches to this case are given in the protocol. One is impressed by the pancytopenia. If you look in to the differential causes of this ceaseless loss of blood, of all elements of blood, you find there are a number of major classifications that can be referred to as toxic.

If you look at the first week of therapy there

wasn't a drug given that would not have cleaned out a person's bone marrow, such as the sulfas, chloromycetin. The agents used to control fever can cause a panhemolytic cytopenia.

Infectious Diseases

Second classification, infectious diseases; there is a history five years before of tuberculosis and therapy for active tuberculosis. There is a disease known as splenic tuberculosis. This isn't just miliary tuberculosis, this is splenic tuberculosis in which the patient develops hypersplenism. The cases are noted as rare. It is known that anemia is frequent in tuberculosis but not this type of anemia. I don't think we ever see anemia progressive as here unless some other disease is present. We have had atypical leukemia cases that died of panhematocytopenia which turned out to be a miliary tuberculosis but in ten years this is the only case we have seen.

We don't have a septicemia, with all the blood cultures negative, but Brucella group would take a special type examination.

Febrile Diseases

Now the neoplastic causes. Hodgkins is a very typical problem of a febrile illness terminating in death with enlarged spleen and not necessarily with adenopathy or masses. This was thought of on the protocol. The illness was very brief, in a younger person. There were no masses to suggest adenopathy of the hilus of the chest on X-ray, or palpable abdominal lymph nodes. There are malignancies of the spleen which can only be diagnosed by splenic puncture biopsy or splenectomy. This was not attempted. We, in short, would like to know what is in the spleen. Other neoplastic possibilities suggest an aleukemic leukemia. This was not an agranulocytosis although you get the impression that you deal with a throat infection and a typical death, toxic or otherwise. However, granulocytes were present on all smears, although those notes on these laboratory tests indicate too few to count. Also, the granulocytes reported on your protocol may not have been granulocytes. The last count was 400 and although they have described an extreme left shift with juveniles present, not too few to count. Platelet count apparently was real and the patient had gastro-intestinal bleeding, although there were no remarks as to the skin, there were no petechiae, no ecchymoses to suggest that it was a real thrombocytopenia.

Metabolic Causes

Metabolic causes of panhematocytopenia. I presume hypersplenism would fit here, I don't know where you would put these discollagen diseases. It is not unusual for a young person to die rapidly after some respiratory infection with one of these collagen diseases. Periarteritis; no tests were made related to this, no biopsy—there was nothing to biopsy. There was no evidence of arterieis and nothing to suggest a skin rash.

The degenerative diseases should not enter here, unless you want to throw into degenerative or aging processes insults of antiphylactic drug reaction. The next approach to the case is the enlarged spleen and I will not change the differential discussion from an enlarged spleen to that of a panhematocytopenia so the final clue that was indicated from the protocol was the suggestion of complications of the tuberculosis and this is difficult. There are degenerative changes of chronic disease such as the amyloid or para-amyloid group which can crowd out bone marrow. Incidentally, no bone marrow examination is indicated here which amazes me, so many of the consultants referred to this as being a blood dyscrasia but this is not given to us. Spinal tap was done, why, I don't know, except it is a febrile disease, undiagnosed, and I would presume this was the time of our viral infections in which there was no encephalomyocarditis problem with acute illness and acute rapid demise.

Abnormal EKG

The EKG was abnormal, this is apparently a late one, related to a very high fever. I can add nothing more, I think that we are dealing very likely with a discollagen problem and that tuberculosis is not the cause of the panhematocytopenia and one must consider periarteritis with polyvisceral involvement, lungs, heart, kidneys, spleen and the bone marrow, as against the possibility of a malignancy which the most common would be a Hodgkins disease or some other lymphoma.

Dr. Solomon Heller:

This type of case is always a problem. It leaves a lot of diagnostic possibilities. Certainly the primary situation here is a pancytopenia but most strikingly in the area of white cell and platelet

counts. The other striking feature is that the patient seemed to become acutely ill rather rapidly and go down hill rather rapidly. It would be interesting to know if the patient had had any medications of any sort within the recent past prior to admission and whether he had had any fever prior to admission and for how long. Of course a bone marrow and a Coombs test would also have been helpful.

There are several diagnostic possibilities. Basically this is a dyssplenism, hypersplenism or aplastic process. Either one is possible. You can have the spleen either way, you can have the pancytopenia either way, if you had a bone marrow you would know better. The typical picture of an aplastic anemia is an empty bone marrow and an empty blood. A bone marrow biopsy would give an excellent differential for an aplastic process. I think you can at least pretty well exclude a hemolytic anemia because the patient had a fairly normal bilirubin. We hon't have a Coombs test, so we don't know absolutely whether there might not have been some associated hemolytic process.

Causes Are Legion

I didn't notice a reticulocyte count either. The causes of aplastic anemia are rather legion and this patient had drugs which had been cited as possible entities in producing aplastic crises. With chloromycetin, however, there usually has been protracted administration, with the aplastic anemia occurring several months later, while here we have an acute sort of process and we have no history of chloromphenicol administration in the past. The patient received streptomycin but only after the onset of the illness. It would be nice to know if he had received any drugs just previous to admission, within the previous week to a month.

Even quinine has been known to produce similar results. I might in passing consider the disease thrombotic thrombocytopenic purpura. These people are very sick and die very fast. The most essential diagnostic feature is that they have a severe thrombocytopenia. I wonder if the patient had neurological symptoms, as these patients often do. That might have led to the spinal tap. These patients, however, usually have an elevation in the white count, a leukemoid type of reaction.

They also have as I mentioned, a rather severe hemolytic anemia. The bilirubin of this patient is not compatible with that. This is a nice diagnosis but it doesn't fit the case altogether. Then you have all the entities that Dr. Postelwaite grouped, your collagen diseases. Certainly in this particular case with albuminuria, the anemia and leukopenia, and thrombocytopenia you have to at least mention luplus in passing, even in the male. It would have been nice to have known whether he had also a hypoprothrombinemia and again the Coombs test and certainly an LE test would have been helpful.

However, this rather precipitous course is a little bit unusual for LE and I would just mention it in passing rather than anything else. Another rather unusual thing which will, however, produce a very similar picture is a disseminated tuberculosis, miliary. Once in a while, particularly in the aged, however, the hematological changes are extremely bizarre, anywhere from polycytemia to an aplastic anemia.

Aleukemic Leukemia

I would very strongly consider an aleukemic leukemia. Certainly a bone marrow would have given us a diagnosis here. An aleukemic leukemia would exactly produce the symptoms which we have here, namely, an acute down hill course with a pancytopenia peripherally and death with fever. Hemorrhage certainly is a part of the picture. This diagnosis absolutely requires a bone marrow. You can have Hodgkins and we see them time and time again or lymphosarcoma or reticulum cell sarcoma with no significant adenopathy, maybe an enlarged spleen.

These patients run a very high fever. Even biopsies of lymph nodes will be negative. They go down hill, and you might even pick up Salmonella and treat them as such, which would not have any effect, they go down hill and die. So actually in this case I am afraid there is no one finding that would really point to an absolute diagnosis. As statistically speaking I would call it a lymphoma and the other things that I mentioned would certainly be in the background. Since he did have tuberculosis somewhere along the line, I would consider this entity of disseminated tuberculosis as a distant possibility.

As far as treatment is concerned, I would certainly have been much more tempted to swamp the patient with tremendous doses of steroids covered by antibiotics, even if it were tubercu-

losis. This is the only hope you have in a lymphoma and doses of a thousand milligrams of prednisone have been used and even in cases that have not responded to the drugs usually used in leukemia and have gone through other therapy will respond to tremendous doses at least temporarily, and you always hope if they do so perhaps this will end that particular cycle and they will go along for a while longer.

Clinical Diagnosis: Fever of unknown origin; malignant lymphoma.

Dr. Postlewaite's Diagnosis: Collagen disease with pancytopenia, probably tuberculosis.

Pathological Diagnosis: Reticuloendotheliosis with hypersplenism; questionable Hodgkins disease.

Pathological Discussion: Dr. F. P. Bornstein:

On autopsy we found a rather slender young male. The external examination was not remarkable, nor were the findings in the thoracic cavity.

Both the liver and the spleen were markedly enlarged. The liver weighed 2200 grams, the liver parenchyma was dull yellow and homogeneous. The spleen weighed 1000 grams. The surface of the spleen was dark blue, somewhat wrinkled, and free of nodules. On cut surface one is impressed with the total disappearance of the normal splenic pattern. Instead there is a dark red surface sub-divided by small fibrous bands with fine necrotic stripings in a few places. The lymph nodes were questionably enlarged. The kidney was slightly enlarged. My gross impression, specially in view of the small necrotic foci and a large spleen, was that of Hodgkins disease. However, on microscopic examination the situation became rather confusing. The bone marrow was hyperactive but essentially normal, which indicates hypersplenism but an absence of a leukemic process. The changes in the spleen and lymph nodes were essentially of the same character, consisting of a very marked proliferation of the reticulo-endothelial cells with displacement of normal lymphoid tissue. In addition some of the lymph nodes showed occasional foam cells and extensive areas of necrosis. A further feature found in a few lymph nodes was the presence of bizarre hyperchromatic giant cells.

No Evidence of Tuberculosis

What can we conclude from this? If we belong to the school of thinking which would accept the presence of Sternberg-Reed giant cells as incontrovertible proof of Hodgkins disease, we can neatly classify this as Hodgkins and sweep our doubts under the rug. However, I think that is a rather forced solution of the problem. Actually we have here a rather non-specific febrile disease with extreme damage to the reticulo-endothelial system with minimal proliferation and a few foam cells. In view of the normal bone marrow and the lack of real proliferation, we have to exclude the group of monocytic leukemias. I am unable to give a definite diagnosis in this case but I feel that it belongs in the general group of systemic type reticulo-endothelial diseases, perhaps somewhat related to the Letterer-Siwe type complex. There was no evidence of tuberculosis.

In summary, then, we have a man who recovered from his tuberculosis and died of a very acute febrile illness associated mainly with profound damage to his reticulo-endothelial system.

El Paso Chapter of American Association Of Medical Assistants Is Going Concern

El Paso Chapter of American Association of Medical Assistants held its first meeting Feb. 22, 1960, and will hold its next one July 12. The Association with 44 charter members was approved by El Paso County Medical Society in November 1959.

The advisory board appointed by Dr. Delphin von Briesen, president of El Paso County Medical Society, consists of the Society's public relations committee of which Dr. Edward Egbert is chairman.

Officers of El Paso Chapter of the Association are Mrs. Phyllis Greene, president; Mrs. Bernice Gharis, president-elect; Miss Francis McIntyre, vice-president; Mrs. Ethel Mayberry, recording secretary; Mrs. Billie McConnell, corresponding secretary; and Mrs. Rose Rodriquez, treasurer.

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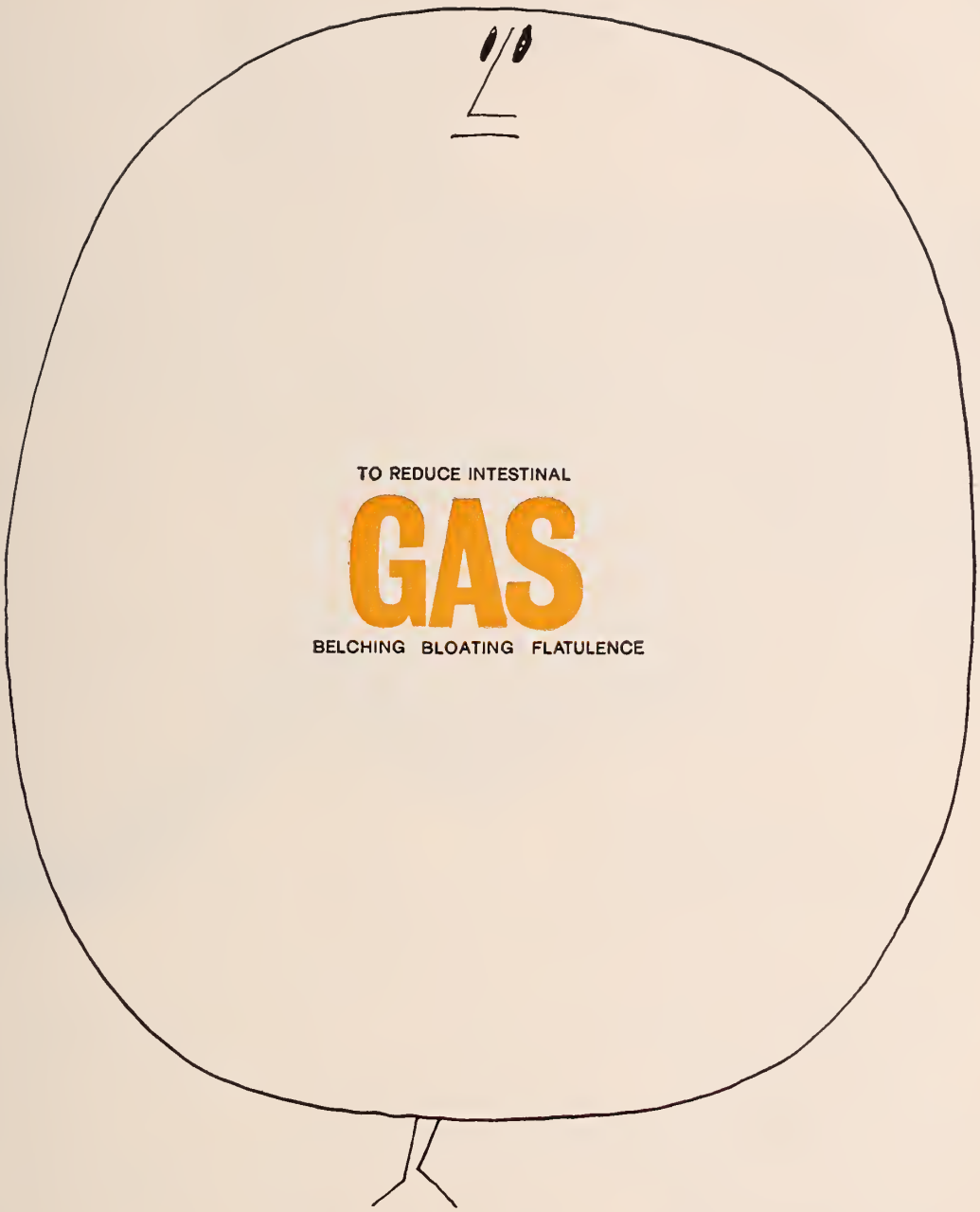
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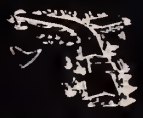
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1. Smylie, H. G.; Webster, C. U., and Bruce, M. L.: *Brit. M. J.* 2:606, Oct. 3, 1959. 2. Hodges, F. T.: *GP* 14:86, Nov., 1956.

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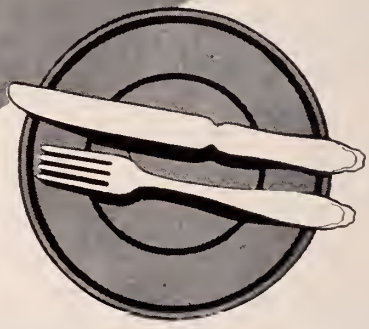
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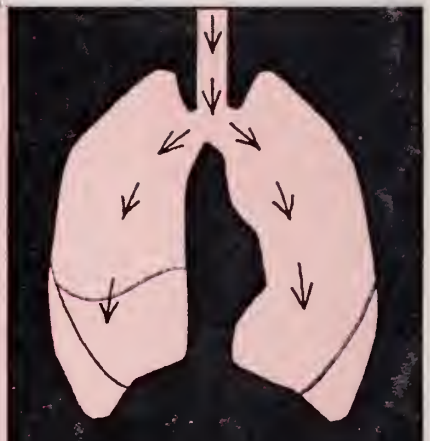
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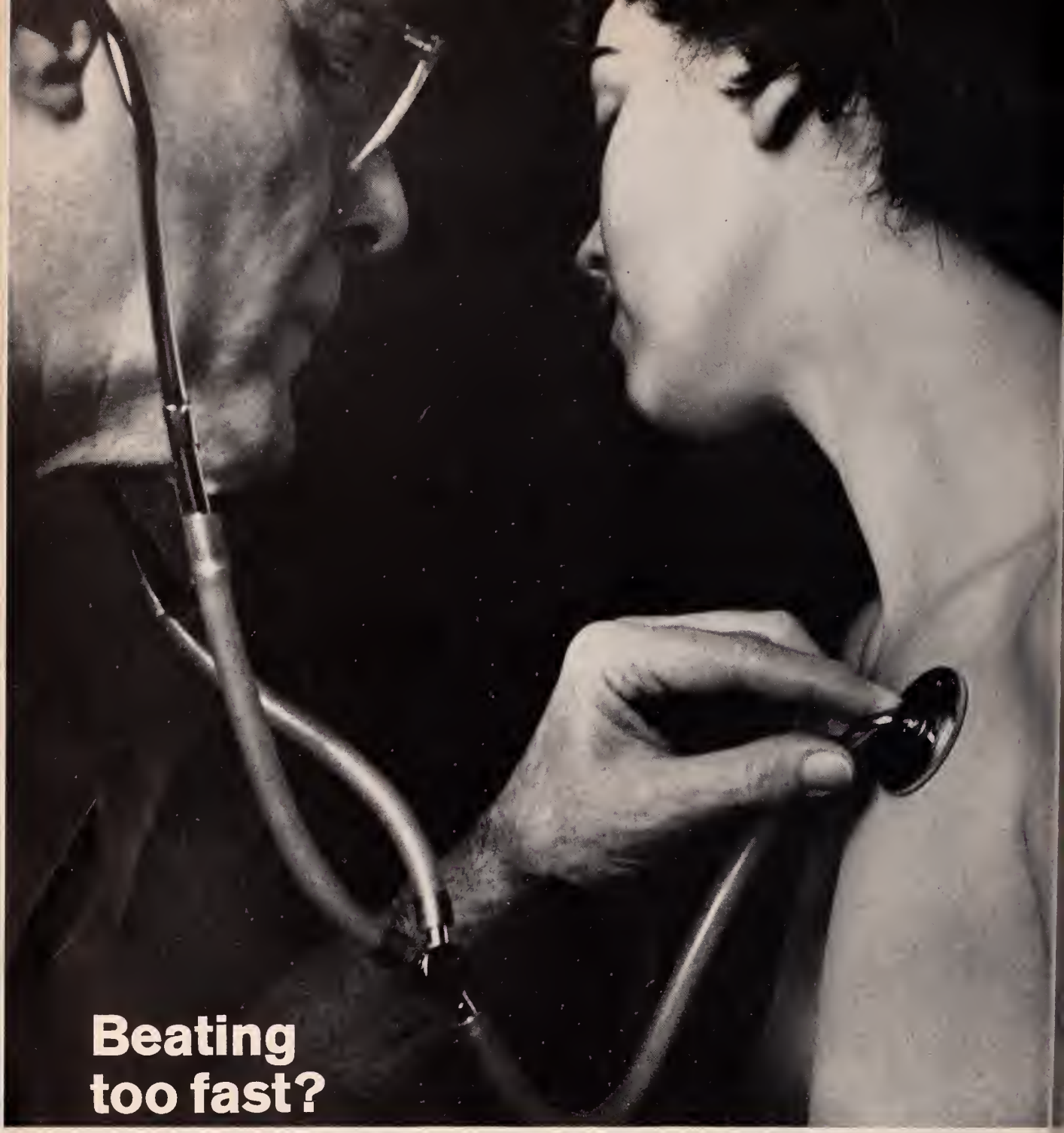
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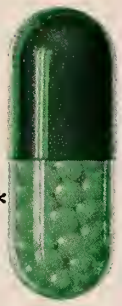
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VOL. XLI AUGUST, 1960 No. 8

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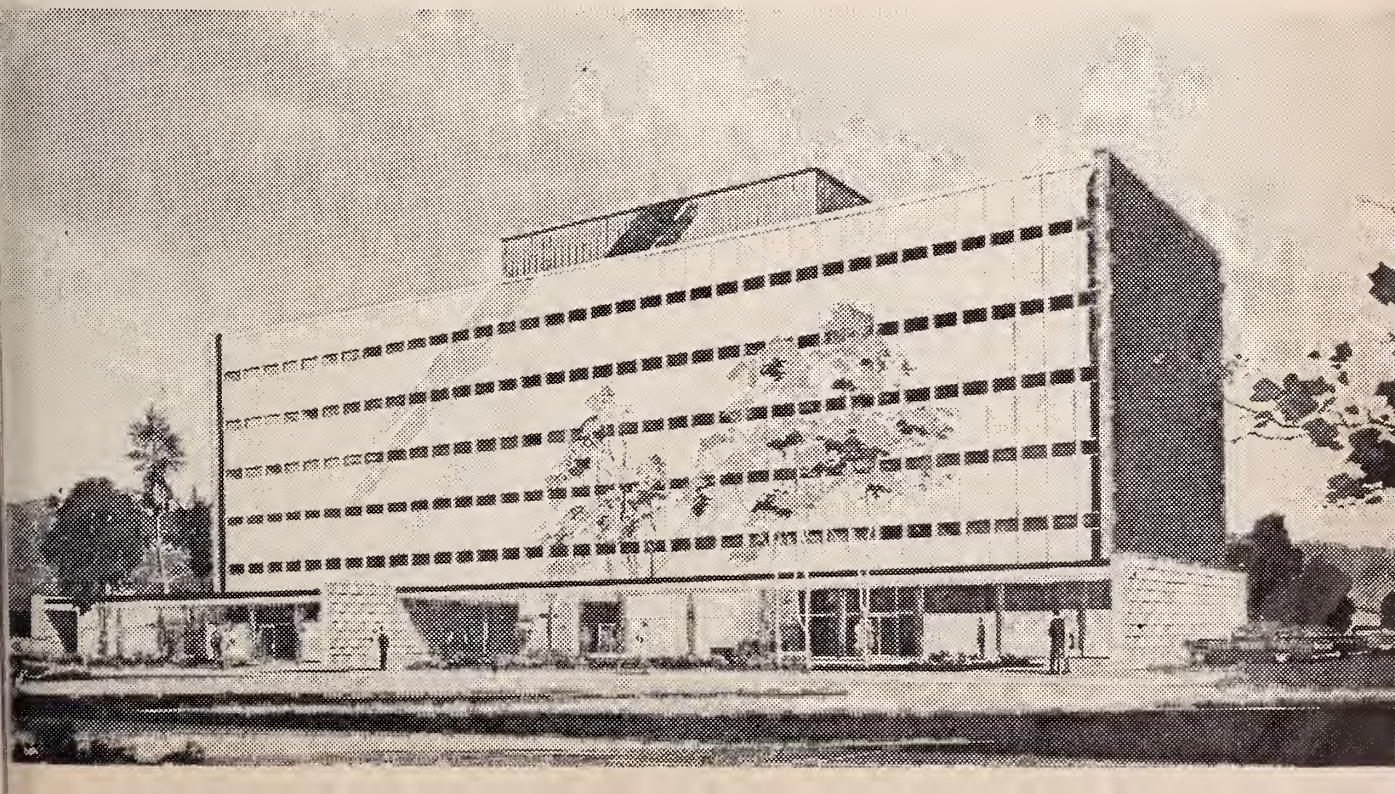
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COMING MEETINGS

97th Western Cardiac Conference, Colorado Heart Association, Denver, Aug. 15-20, 1960. Category I G. P. Credit Available.

Postgraduate Course in Pediatrics, University of Colorado School of Medicine, The Stanley Hotel, Estes Park, Colorado, Sept. 1-6, 1960.

University of Texas Postgraduate Course, Turner Home, El Paso, Sept. 18, 1960.

Southwestern Medical Association, 42nd Annual Meeting, Hotel Hilton, El Paso, Oct. 20-22, 1960.

Symposium, "Medical and Biological Aspects of Energies of Space," Hilton Hotel, San Antonio, Oct. 24-26, 1960, sponsored by Air Force School of Aviation, Brooks Air Force Base, Texas. Symposium coordinator, Jack Harmon, Southwest Research Institute, Box 2296, San Antonio 6, Texas.

American Fracture Association, Annual Meeting, Mexico City, Oct. 30-Nov. 4, 1960.

Southwest Obstetrical and Gynecological Society, Annual Meeting, Riviera Hotel, Las Vegas, Nev., Nov. 7-8, 1960.

Medical Society of the United States and Mexico, Annual Meeting, Guadalajara, Nov. 8-10, and Mazatlan, Nov. 11-12, 1960.

Texas Orthopaedic Association, Galveston, Texas, April 24, 1961.

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1. Chapman, T.L., Expectant treatment of benign prostatic enlargement, **Lancet** 2:684, 1949.
2. Hinman, F., The obstructive prostate, **J.A.M.A.** 135:136, 1947.
3. Feinblatt, H.M., and Gant, J.C., Palliative treatment of benign prostatic hypertrophy, **J. Maine M.A.** 49:99, 1958.
4. Ibid. #3, **Southwestern Med.** 40:109, 1959.

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1. Biegeleisen, H. I.: Clin. Med. 2:1005, 1955. 2. Roberts, J. T.: Clin. Med. 4:1375, 1957. ©1960, A.P. Co.

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Scott, J. S., & Kellaway, P.: M. Clin. North America **12**:*415 (March) 1958.*

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References: *1.* Lichtman, A.L.: *Kentucky Acad. Gen. Pract. J.* 4:28, Oct., 1958. *2.* Lichtman, A. L.: Scientific Exhibit, Internat. Coll. Surgeons, Miami Beach, Fla., Jan. 4-7, 1959. *3.* Gruenberg, Friedrich: *Current Therap. Res.* 2:1, Jan., 1960. *4.* Kearney, R. D.: *Current Therap. Res.* 2:127, April, 1960.

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1. Graham, B. S., *et al.* J.A.M.A. *166*:1586, 1958.

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SOUTHWESTERN MEDICINE

VOL. XLI, NO. 8 AUGUST, 1960

Santa Fe Seminar

St. Vincent's Hospital, Santa Fe
March 22, 1960

Upper Gastrointestinal Hemorrhage

Harry D. Ellis, M.D., Chairman
Seminar Summary: R. C. Derbyshire, M.D.
Presentation of Cases: Fred Soldow, M.D.

Case 1

This 41-year-old housewife was hospitalized June 23, 1954, because of weakness, epigastric pain, fainting spells, and tarry stools.

X-ray examination revealed changes suggestive of a duodenal ulcer. Two units of blood were given.

The patient was rehospitalized August 2, 1954 and Sept. 1, 1954, again with symptoms due to upper gastrointestinal bleeding. Her hemoglobin level on admission Sept. 1 was 3.6 grams. Following the administration of several units of blood, the patient was operated upon and a subtotal gastric resection was done. At operation there was no evidence of duodenal ulceration. Examination of the resected stomach revealed a hemorrhagic gastritis without ulceration. At the time of discharge from the hospital the patient's hemoglobin level was 16.3 grams.

She was rehospitalized Oct. 21, 1954, because of progressive anemia. Clinical signs of gastrointestinal bleeding had not recurred. A bone marrow examination at this time revealed erythroid aplasia and myeloid hypoplasia.

Over the next several months numerous blood transfusions were required. The white blood count ranged from 2300 to 4100 per c. mm.

A bone marrow examination May 9, 1955, revealed changes suggesting a developing monocytic leukemia. A differential white blood count at this time revealed 23 per cent monocytes. During the next 14 months the white blood count gradually rose to 90,000 per c. mm. with 90 per cent mature and immature monocytes.

Case 2

This 67-year-old reformed bartender was hospitalized July 24, 1954, for elective surgery. About 1½ years previously he had suffered a massive gastrointestinal hemorrhage. A second severe similar hemorrhage occurred one month prior to admission.

On July 30th, a portal-caval anastomosis was done. At the time of surgery ascites (3,000 ml.) was noted. The liver was cirrhotic. Postoperatively, urinary retention developed and it was necessary to perform a transurethral resection Aug. 18, 1954. Patient was discharged in fairly good condition, August 27, 1954.

On Sept. 14, 1954, he was rehospitalized in semi-coma apparently due to barbiturate intoxication. He was discharged Sept. 22, 1954, in fairly good condition.

During the next 10 months he was clinically well.

Hospitalizations were necessary July 22, 1955, August 3, 1955, and August 16, 1955, because of hepatic coma. There was no recurrence of bleeding or ascites. Death occurred August 22, 1955.

Case 3

This 40-year-old writer was hospitalized Dec. 18, 1952, following a severe gastric hemorrhage. After admission there was no further immediate bleeding. Two units of blood were given.

At 9:00 p.m., Dec. 20, 1952, the patient complained of feeling faint. He then vomited an estimated 1500 ml. of blood. In the next few hours

six units of blood were given. An emergency gastric resection was done, beginning at 12:45 a. m., Dec. 21, 1952.

Examination of the excised specimen revealed a chronic lesser curvature gastric ulcer containing an eroded artery.

The postoperative course was complicated by evisceration (1/1/53) and by a pulmonary infarct (1/10/53). The patient was discharged in fairly good condition January 24, 1953.

Case 4

This 9-year-old female child was well until February 12, 1960, when she vomited bright red blood. This occurred again three days later. In the meantime her stools were noted to be tarry. She was transfused February 16th, 17th and 19th.

The prothrombin time, platelet count, fibrinogen level, bleeding time, Lee & White coagulation time, and partial thromboplastin time were within normal limits.

On Feb. 20th, the child complained of dizziness. Her blood pressure became unobtainable. A blood transfusion was started and an emergency partial gastric resection was carried out.

At surgery the stomach was found to contain about 500 ml. of blood. No ulcers were found. The distal half of the stomach mucosa was diffusely hemorrhagic. Pathologic report on the excised stomach specimen was: Hemorrhagic Gastritis, associated with Acute Vasculitis, probably Allergic (The Vascular Changes are similar to those seen in Schoenlein-Henoch's Purpura).

No further bleeding occurred during the next 48 hours. Intermittent gastric bleeding began again Feb. 23rd. On February 27th, the child vomited an estimated 500 ml. of bright red blood. The blood pressure fell to 50/0. A transfusion of blood was begun and 200 mg. of Cortisone were given. The blood pressure slowly returned to normal.

Cortisone in smaller amounts was continued at regular intervals. No further gastric bleeding occurred.

Cortisone was discontinued March 4th, and the patient was discharged in good condition March 5, 1960. She has remained well to date.

Commentary: Dr. R. C. Derbyshire:

I would like to comment briefly on the cases which were abstracted.

As you will notice we have a rather wide variety of cases and we have all sorts of complications from the hematological to the psychiatric. The latter was not mentioned in the case of the gastric ulcer. It's somewhat embarrassing to have a patient on whom you've done a gastric resection come back with leukemia. But this was not suspected for a long time and the diagnosis was not made until several months later. The gastrectomy was done as a life saving procedure and was an example of something I would like to mention later. The reformed bartender deserves little comment, except for the fact that a successful portalcaval shunt was done on him and he lived happily in a state of euphoria for a year afterwards. He would come in periodically with ammonia intoxication which was handled with glumatic acid. How much good it did I don't know but the final solution was to put him on a non-protein diet. Whenever he would get hungry and eat steak, he would come back in a coma.

The third case is more or less clear cut, a massive gastro-intestinal hemorrhage from a gastric ulcer. One complication was not mentioned. On the second post-operative night, the patient was caught just as he was jumping out of the window. The psychiatrist—I don't think he is here tonight —told me the reason he had bled from the gastric ulcer in the first place, was that he had an unconscious desire to commit suicide. This unconscious desire became very tangible, and fortunately the nurse caught him just as he was going out the window and the psychiatrist very conveniently was out of town, so I had to take over his duties. The next day I said, "If you jump out of the window and mess up my anastomosis, I'm going to shoot you." He then behaved very well.

In the fourth case, I don't think the diagnosis, pathologically, is entirely established as Henoch-Schoenlein Purpura. This again was an operation of desperation, and I do not recommend routine gastric resections in 9 year old children. This patient, I don't believe, bled from the suture line of the anastomosis. She was free of bleeding for three days postoperatively. Then, she began to bleed massively again. As far as I can determine, cortisone is not specific for Henoch's Purpura, but it seemed to work in this case. I guess we have to give it credit.

Differential Diagnosis: Dr. Edward Goodrich:

Rather than give a formal discussion on the differential diagnosis of gastrointestinal hemorrhage,

I thought that I would perhaps go through some aspects that are less commonly thought of and some of the points of differential diagnosis.

If a patient vomits large quantities of liquid blood or clots, or passes a grossly bloody or tarry stool and simultaneously goes into shock, there is no question of there being a bleeding lesion present somewhere in the gut. If, however, a patient enters with vague complaints of fatigability, tiredness, malaise, or loss of appetite, we are much less likely to consider a bleeding lesion of the gut as the source of her anemia. Furthermore, although a guaiac test of the stool on the rectal glove is an excellent screening test for the presence of such a lesion, it is not infallible, and we are duty-bound to consider first the gut as the cause of any hypochromic microcytic anemia.

If we have confirmed the gastrointestinal tract as the source of blood loss, then we must consider the rate of loss, even before arriving at a definitive diagnosis. Is this a very slowly leaking ulcer which will respond to a good medical regime and iron therapy? Is the lesion bleeding rapidly enough to require replacement of at least part of the blood loss? Is the patient in shock, and should an artificial blood substitute be employed to maintain kidney perfusion pressure before type specific replace is effected? It is helpful to try to quantitate the loss grossly. This is probably most conveniently done by recording replacement units needed, but it is also wise to measure the quantity of the vomitus or the tarry stool, an indelicate but frequently very helpful task. Determining the rate of bleeding may take 12 to 24 hours, or it may only require a few minutes, but it is the first clinical consideration.

Having established the rate of bleeding, and having taken the necessary measures to restore and maintain the vital processes during our work-up, we must next try to establish the level at which the bleeding occurs. The only lesion found distal to the ligament of Treitz which causes hematemesis is a marginal ulcer of the jejunum following gastrojejunostomy so that the vomiting of blood always indicates a lesion proximal to the superior mesenteric artery. On the other hand, a nosebleed can be a source of occult blood in the stool, and this fact delineates our problem. The dark middle reaches of the gastrointestinal tract are most often the source of bleeding and barring surgery, our approach must be almost entirely indirect.

It is not necessary to detail here the historical aspects of the various disease which can cause GI bleeding. However, passing note should be made of what could be called the forgetful patient. This man may have been eating Tums so regularly that he does not consider their use unusual and he only admits the presence of symptoms or the taking of medication on direct, specific, and perhaps repeated questioning. In these individuals the hazard of an incomplete history is apparent. In this locale, some of us are also faced with a language barrier which may require major exertions to elicit the nuances of history in the more obscure cases of bleeding. The family history should never be neglected as it will occasionally provide a strong clue to the source of difficulty, whether it is polypopsis, cancer, ulcerative disease, or a vascular defect of a familial nature.

The specific signs by which certain disease may be recognized are numerous, but a few minutes spent looking for these signs during the physical examination may be rewarded by an unusual and accurate diagnosis. Surrounding the lips we may find the pigmented areas or freckles of the Peutz-Jeghers syndrome, the hallmark of intestinal polypopsis. Or within the mouth, on the buccal or palatine mucosa we may find telangiectatic or purpuric spots mirroring changes occurring farther down in the intestinal tract. Delay in transit of swallowed water from the mouth to the stomach over 8 or 10 seconds can indicate an inflammatory or mitotic obstructive process in the esophagus, and particular attention should be paid to the left supraclavicular lymph nodes for metastatic enlargement. We should be mindful that the characteristic epigastric tenderness of ulcerative disease of the stomach and duodenum may be an extremely good buffer.

Cirrhosis can frequently be suspected by the finding of spider angiomata, reddened palms, breast hypertrophy or absence or sparseness of hair, as well as by the more common stigmata of hepatomegally and venous dilatation in the trunk. The localized increase of naturally-found shunts around the liver in the falciform ligament may carry enough blood to create a rumble audible by stethoscope, the Cruveilhier Baumgarten syndrome.

Because of its small lumen, bleeding tumors of the small intestine, particularly toward the lower end, are prone to cause crampy, partially obstructive symptoms. To a lesser degree, this is true of

the sigmoid colon. Of course, the classical cause of silent intestinal bleeding is a tumor of the cecum, but benign and malignant tumors of the small intestine can also behave in the same fashion.

The necessity of a rectal examination can never be overemphasized.

Certain special studies may be of great help in arriving at a diagnosis of the patient bleeding from the gastrointestinal tract. Radioiodinated serum albumen and radiochromate tagged red cells are excellent methods for determining the blood volume and its changes. However, Evans blue dye or even the observation of the amount of hematocrit fall or hemodilution occurring over a period of 24 hours after the bleeding episode can give a fairly accurate index of blood loss. Direct observation of the proximal and distant parts of the guts with the esophagoscope or sigmoidoscope may provide the answer and the latter particularly is frequently indicated in lower tract bleeding before X-rays are taken. One is hard put to think of a contraindication to the use of diagnostic X-rays in the acutely bleeding patient as long as the patient is being kept out of shock and the blood loss is being matched by replacement therapy. Although the examination can be performed in bed, using portable equipment, better films and fluoroscopic observation are possible in the department. Double contrast techniques should be part of every lower bowel workup for bleeding. Splenoportography can delineate varices.

In massive upper GI bleeding a therapeutic test with the Sengstaken-Blakemore tube is indicated if the least suspicion of varices exists. Since this is probably the best emergency treatment for bleeding varices, and since varices account for a large portion of the massive upper GI bleeders, the diagnostic use of the tube should be encouraged. This is true, even if varices are not demonstrated on X-rays.

Duodenal washings and the secretin test are described as being helpful in the diagnosis of biliary and pancreatic neoplasia. The long intestinal tube can be used to localize a bleeding site in the jejunum or ileum; but a more direct method is available. The value of a careful exploratory operation should not be underrated, even though it carries the risk of a negative result.

Laboratory data are most useful in ruling in or out the various hemorrhagic diatheses. Included are the usual bleeding and clotting studies, the capillary fragility test, and the prothrombin time. Of occasional help are the fibrinogen, the clot dissolution or fibrinolysin, partial thromboplastin, platelet, and marrow studies. Every GI bleeder should have a bromesulphalein test performed, and any level over 15 per cent retention should make the liver highly suspect, even though in a significant number of cirrhotics with upper GI bleeding, the source is an ulcer.

Although sometimes easy, the diagnosis of gastrointestinal bleeding can often be extremely difficult, taxing both the patient and the physician. Approaching the bleeding patient with a sequential program will often provide an earlier, more exact diagnosis.

Medical Management: Dr. Charles McGoey:

On a panel with three surgeons I feel a little like a Texan at the Pearly Gates. St. Peter looked at him and asked who he was. He said he was Sam Houston Jones from Texas. St. Peter looked at him sharply, shook his head sadly and said: "All right, you can come in but you're not going to like it."

I'll confine my remarks to bleeding presumed to be originating from the stomach either from a peptic ulcer, gastritis and erosions, or from a highly suspected or known duodenal ulcer.

These problems usually come to the hospital and are more apt to be seen by the general practitioner or by the internist, following a massive hematemesis, a sudden spell of weakness or they may have noticed that they passed tarry stools.

To begin with, some people are rather veterans in this game and have had more than several episodes of tarry stools and will sometimes try to persuade their physician to handle this latest episode on an outpatient basis. This is strictly a hospital problem. Some get by out of pure neglect, but it is luck rather than skill which results in a good outcome.

In addition to bed rest on admission to the hospital, they should be immediately crossmatched, for at least four pints of blood. The old rule, that if the pulse is above 100 or the blood pressure is under 100 systolic, is still a fairly good one, and I think it is a rather useful thing to take these figures when the patient is sitting up rather than reclining.

We have all been suddenly surprised by the man who has been quietly bleeding into his gut, with a

good pulse and blood pressure in prone positions, who suddenly has neither pulse nor blood pressure in the space of five minutes. Instruct the nurses to sit the patient up before they take the routine pulse and blood pressure readings. It may avert a catastrophe.

The patient should be transfused until the hemoglobin level is over 10 grams or the red count is above three million. During periods of relatively sparse nursing observation, such as nighttime, the minimum of observation period during the night of the pulse and blood pressure reading should be every 15 minutes.

For sedation, barbiturates, rather than narcotics are preferable. If nausea and vomiting are problems, parenteral Vesprin or Compazine or similar preparations are useful until the patient can retain fluids by mouth.

Presuming that the typical problem is a known gastric or duodenal ulcer, as soon as the vomiting is controlled then you start on a full and intensive ulcer regime with anticholinergics, frequent feedings with half and half or perhaps a Meulengracht type of diet.

When to X-ray these patients comes down to a question as to whether or not we know what is going on. If this is a known patient, who's been followed by the same doctor in the past, with a chronic gastric or duodenal ulcer, I think it is probably wise to defer X-ray examination for several days.

If, however, this is a brand new problem with bleeding from the upper gastrointestinal tract of uncertain origin, then I don't think anyone would be appreciably harmed by the quick trip to the X-ray Department on a stretcher and prone examination on the table by the radiologist.

From start to finish this problem should be a joint problem between a surgeon, the general practitioner or an internist. I think the best way for us non-surgical people to get our surgical conferees' dander up is to postpone the surgical consultation until we are pretty much at the end of our rope as far as medical management goes. They should be seen early after admission by the surgical staff and decisions as to when medical treatment has failed should be a joint decision between the medical man and the surgeon.

Things that have influenced our finding in this respect are 24 or 36 hours of medical management without appreciable response. If the patient is in the older age group, I think most of us are a little inclined to give up medical management sooner and consider radical surgery a little earlier.

If we know the source of bleeding is from an old sclerotic ulcer in an ancient diabetic, that too is another reason for early surgery. A suspicion that there is possibly concomitant penetration or localized perforation of the ulcer is also another reason for earlier rather than later surgical interference.

However, we have all seen many people who have defied all these rules. Not too long ago, Dr. Derbyshire and I perspired through an 84 year old woman who was a diabetic, who was in congestive heart failure and had an old sclerotic ulcer, who bled away 4 pints in 12 hours, who very neatly settled the question of surgery by telling us in her best Spanish, that nobody with a knife was going to get in the same room with her. That lady recovered very nicely in a matter of 5 days against all the rules and regulations.

Another fairly good indication for emergency gastrectomy, day or night is if the patient has taken more than 2500 cc. of blood to keep even with the game of blood loss. That, I think is a circumstance, in which all would agree indicates immediate surgery.

The main points, I would like to emphasize, are that decisions in regard to how much, how long, medical treatment should go on and when surgical interference is proper should be a joint decision between at least two physicians. The second one is for the medical people particularly to always keep the situation well in hand by being at least 1 pint ahead of this bleeding game.

Dr. Ellis:

We are very fortunate this evening to have Dr. L. H. Wilkinson with us, from Albuquerque. Dr. Wilkinson has consented to talk with us about the surgical treatment of upper gastrointestinal hemorrhage. Dr. Wilkinson.

Surgical Treatment: Dr. L. H. Wilkinson:

Although the medical management and surgical treatment of upper gastrointestinal hemorrhage are divided for purposes of discussion, these two phases of the management (in fact, all aspects of the management) of this difficult problem should be carried out simultaneously in cases where there is significant upper gastrointestinal hemorrhage.

A few weeks ago this problem was discussed at the Saturday morning surgical rounds at the Bernalillo County Indian Hospital. Present at the

meeting were representatives from the Surgical Staff of the University of Colorado Medical School, Surgical Staff of the Veterans Administration Hospital in Albuquerque and members of the medical and surgical services of the Bernalillo County Indian Hospital. We all agreed that this problem should be managed jointly from the beginning by the internist and surgeon who should see the patient together at frequent intervals. They, of course, should avail themselves of the skill and advice of the radiologist and pathologist. But beyond this, we had difficulty in agreeing on a simplified method of management which we could outline for the House Staff. I feel this difficulty was due largely to the fact that it is so difficult for anyone to accurately answer the important question, "Is the patient continuing to bleed?"

Internists and surgeons, alike, may be placed in three categories:

1) Those who feel that all patients with upper gastrointestinal hemorrhage should be operated on at once.

2) Those who postpone surgery until even the relatives are nervous about the continued loss of blood.

3) The group which includes most of us—those who advise surgery when there has been massive bleeding or there is evidence that the patient is continuing to bleed.

We consider ourselves as belonging to the latter group and have arbitrarily set a maximum of 3,000 cc. of blood (six 500 cc. units), which we will give before advising surgery. We perhaps could just as well have chosen the figure of 2500 cc. or 3500 cc.; the object in picking a figure being an attempt to avoid observing the bleeding patient until his entire blood volume has been replaced before surgical intervention. First, the estimated blood loss is determined. If this is more than 3,000 cc. the calculated amount is replaced as rapidly as is deemed safe and immediate surgery advised.

If less than 3,000 cc., then the calculated amount is given while the diagnostic tests are being performed. If there is absence of vomiting and tarry stools and repeated observations of the hematocrit, pulse, color, etc., indicate there is no further bleeding, the patient is considered to have responded to "the transfusion test". This patient is continued on medical management. However, during the next few hours or days, if there is evidence of further bleeding, surgery is advised when more than a total of 3,000 cc. are needed to restore the patient's blood volume.

We hold steadfast to the rule of not administering more than 3,000 cc. without advising surgery. However, we do not wait until 3,000 cc. of blood are necessary before advising surgery in many patients. For example, if a patient with a chronic duodenal ulcer is a borderline surgical candidate due to previous perforation or intractability or impending obstruction and bleeds almost any amount from his duodenal ulcer, he will more than likely be advised to have immediate surgery. This advice is given because it is felt that the added factor of bleeding makes him a definite surgical candidate, and there is no need in taking the risk of further hemorrhage before surgery is performed.

From the history, gastrointestinal x-ray studies, B.S.P. and other diagnostic procedures, one usually has a reasonably accurate idea of the source of the upper gastrointestinal hemorrhage. Most often the bleeding will be due to a chronic duodenal ulcer. In these cases, due to the anticipated difficulty in handling a shortened, indurated duodenum, the abdomen is opened through a right subcostal incision which is extended across the midline in a straight line to the left costal margin.[1] Bleeding esophageal varices, esophageal hiatus hernia, upper gastric lesions, and obscure lesions are approached through an upper midline incision, primarily because of better exposure of the lower esophagus. Also because of the simplicity of opening and closing the incision.

Crawford, et al.,[2] have proposed that bleeding esophageal varices be aproached from the transabdominal route. Having followed their technique in the past few cases, we too feel this approach is preferable. Briefly, the abdomen is opened through an upper midline incision with a Sengstaken or Levine tube in place in the esophagus. A long anterior gastrotomy is preformed parallel to the long axis of the stomach. The bleeding point is identified and occluded, if possible. Two soft rubber catheters are then sutured to the end of the esophageal tube and the esophageal tube then pulled cephalad until the catheters are well up into the esophagus. Traction is then maintained on the esophageal tube while outward and anterior traction is made on the catheters, thus opening the lower esophagus.

From one to three varices are usually found in the esophagus running parallel to the long axis, and usually extending down into the stomach for a

variable distance. A 000 chromic catgut suture with swedged needle is started in the lower end of each varix and continued superiorly into the esophagus for at least six cms. as a continuous interlocking suture. Often the bleeding site is at the cardioesophageal junction or in the stomach, in which case the site of bleeding is much easier to control through the transabdominal approach. This approach has the added advantage of permitting inspection of the other intra-abdominal organs and of permitting appropriate treatment, when the diagnosis of bleeding esophageal varices is erroneous.

On the first occasion in which we utilized this approach we found the bleeding varix located 5 cm. below the cardioesophageal junction on the posterior gastric wall. This would have been almost impossible to have controlled through a transthoracic opening in the esophagus.

Not infrequently the patient with an esophageal hiatus hernia develops varying degrees of ulceration in the portion of the stomach at or above the level of the diaphragm which can be the source of alarming upper gastrointestinal hemorrhage. Through an upper midline incision the stomach is reduced into the peritoneal cavity and inspected. If there is gross evidence that the lesion is malignant, esophagogastrectomy is usually necessary. In the absence of gross evidence of malignancy the hernia is repaired by aproximating the crux of the diaphragm posterior to the esophagus and the ulcer usually promptly heals. If active bleeding is present, a gastrotomy is performed and the bleeding point sutured.

Bleeding gastric neoplasms, encountered infrequently, are best treated by resection. When located near the cario-esophageal junction, esophagogastrectomy may be necessary.

In performing subtotal gastrectomy, we routinely resect two-thirds to three-fourths of the stomach without section of the vagus nerves. For gastric lesions, a gastraduodenostomy is usually done, while a post-colic gastrojejunostomy is done following resection for duodenal ulcer.

We have not combined 50 per cent gastrectomy with vagus section for the following reasons: Vagotomy combined with gastroenterostomy has not given as good long term results as adequate gastrectomy. Failure of the former is considered to be due to the fact that incomplete vagotomy has been done or regeneration has occurred. It seems logical to assume that if 50 per cent gastrectomy alone is inadequate in the treatment of duodenal ulcer, then when this procedure is combined with vagotomy, which may prove to be incomplete, the patient is then left with an inadequate gastrectomy. Also removing 20 per cent more of the stomach can probably be done more rapidly than adding vagotomy to a 50 per cent resection. However, should this procedure prove superior to the so-called "adequate gastrectomy", we hope our thinking will be sufficiently flexible to accept it.

High gastric ulcers which appear benign grossly are treated by subtotal gastrectomy combined with simple excision of the ulcer or ligation of the bleeding point. We believe this method is superior to wedge or sleeve resection due to better postoperative gastric function and the lessened chance of recurrent ulceration.

If no varices are detected and no gastric, duodenal or upper jejunal ulceration is found, the patient is usually considered to have bled from a superficial ulcerative gastritis and a subtotal gastrectomy is performed.

When a bleeding duodenal ulcer is encountered, subtotal gastrectomy is performed. No added effort is expended to resect the ulcer. If there is active bleeding from the ulcer at the time of surgery, hemostasis is obtained by figure of eight silk sutures at the site of bleeding. If the ulcer is eroding the pancreas, these are placed parallel to the long axis of the common duct. The open duodenum is then closed by inversion. If insufficient tissue is available for inversion, a number 24 Mushroom catheter is inserted into the duodenum and the proximal duodenum closed about the catheter with a purse-string suture.

If the patient's condition is critical, duodenotomy is performed with ligation of the bleeding point. A gastroenterostomy is added if the patient's condition permits. If the patient's convalescence is satisfactory, he is returned for elective gastrectomy in four to six weeks.

If the surgeon is unable to demonstrate an esophageal, gastric or proximal duodenal lesion, the distal duodenum and upper jejunum must be carefully examined. If ulceration is found in the distal duodenum or upper jejunum, this almost certainly indicates the presence of an ulcerogenic tumor[3] of the pancreas. A careful inspection and palpa-

tion of the pancreas must be done on all such cases. If a tumor of the pancreas is found and obvious metastases are present, a total gastrectomy must be done in addition to the type of tumor resection which seems advisable. If the pancreatic tumor is detected and no gross evidence of malignancy is present then a near total pancreatectomy should be performed and frozen section requested.

This is a difficult and perhaps unfair request of the pathologist, but if he feels, after careful study, that the lesion is perhaps benign, then most surgeons feel that a subtotal gastrectomy (in addition to the partial pancreatectomy already performed) is sufficient. If no tumor is found by inspection and palpation, we feel that a near total pancreatectomy and subtotal gastrectomy should be performed. These patients having, or suspected of having, an ulcerogenic tumor of the pancreas should be carefully followed postoperatively, by gastrointestinal x-ray studies, gastric analysis, and tests for occult blood in the stool. If any pancreatic tumor remains, there will be an excessive volume of gastric secretion with extremely high acid content. Also the development of gastrointestinal ulceration seems enhanced following subtotal resection.

In summary, most lesions producing upper gastrointestinal hemorrhage are best approached transabdominally. A technique for control of bleeding esophageal varices as described by Crawford has been discussed. High subtotal gastrectomy is the treatment of choice for most gastric and proximal duodenal lesions causing upper gastrointestinal hemorrhage. While less than 100 authenticated cases of ulcerogenic pancreatic tumors have been reported, this condition should nevertheless be considered in all cases of upper gastrointestinal hemorrhage due to ulceration.

Dr. Ellis:

We are going to have the summary at this point and then our discussion. Dr. Derbyshire.

Seminary Summary: Dr. R. C. Derbyshire:

Thank you, Dr. Ellis. I should like to add my welcome to Dr. Wilkinson. We all appreciate his coming up to talk to us tonight, and the fine information which he has given us. I should also like to congratulate the other speakers. I feel that I have learned much tonight. The function of the summarizer is rather easy as he doesn't have to contribute any new ideas at all. He just has to make comments on what has been said.

I should like to make a few comments on some of the points the speakers brought out. Dr. Goodrich certainly covered his subject in fine fashion, and I have very little to add. I should like to emphasize one or two points that he made.

One of these is the diagnostic use of the Sengstaken tube in bleeding from esophageal varices. I think that if this works it is a very good maneuver to employ. If it doesn't work, I do not think that one has proven very much. If the tube is in place, and the balloon is properly inflated and bleeding stops I think you have a very good presumptive diagnosis of bleeding esophageal varices. However, the tube is not foolproof. You do not always get it in the right place with the right amount of pressure. I believe after you get the tube in and the patient continues bleeding you haven't necessarily ruled out esophageal varices and I think probably Dr. Goodrich would agree with that.

I should also like to mention a couple of things in regard to diagnosis. You've probably read about the String Test. It's rather intriguing to me. I have not yet tried it and I don't know whether I will or not until there are more reports on it. Briefly, the test consists of this. A string which has radio-opaque marks on it and some buckshot on the end is given to the patient to swallow. It is followed through by x-ray. After the string is in the proper position, and this article assures me it is very easy to get it in the proper position, never requiring more than two or three hours, Fluorescein is injected intravenously.

The string is withdrawn and examined under an ultraviolet source of light. If only blood is found on the string, it means the patient has stopped bleeding. If Fluorescein and blood is found, it means the patient is still bleeding and the authors claim one can localize the source of bleeding fairly accurately by this means. It sounds intriguing.

I should also like to mention Dr. Wangensteen's refrigeration treatment. I'd like to know more about that. Dr. Wangensteen has developed a large balloon which he places in the stomach and it is connected with a refrigeration machine beside the patient's bed, with coils going to the balloon. The stomach is kept at O degrees Centigrade or maybe a bit higher than that.

The principle is that the gastric secretions are suppressed by this cooling and he claims that he has been able to control massive gastric or duo-

denal hemorrhage by this means. After the initial control of the hemorrhage, the patient is then in better condition for surgery.

I should like to say something about Dr. McGoey's remarks concerning the quiet bleeder. I think that this cannot be overemphasized. Dr. McGoey apparently has a trick he hasn't taught me yet. That is, the sitting up of the patient to take the blood pressure. I think that that is a very fine idea, and I've never seen it done. The quiet bleeder is the terrifying one, of course. When you think you have everything under control, all of a sudden, there being no sign of bleeding at all, the bottom drops out of the blood pressure. I find this rather disconcerting.

I'd like to say a little about the naso-gastric tube in the patient who has had massive hematemesis. I think that there is a little bit of disagreement among the members of the staff here. I do not see why it should be serious. I personally favor inserting a gastric tube when the patient has had a hematemesis. I think in the first place, it serves to quiet the stomach, although it may be an ordeal just to pass the tube. The stomach can be emptied if it is too full of clots. If the patient vomits while the tube in being inserted and gets rid of the clots, so much the better. Also, I think it serves as a guide to the amount of hemorrhage. and to whether or not active bleeding continues.

The joint problem, I don't think we need to mention further. I believe all cases are handled that way in this hospital. I don't think we have had anything but cooperation between the internists and surgeons.

I was most interested in Dr. Wilkinson's remarks. Dr. Wilkinson has had great experience in this field, and I should like to remind you that his mentor was Dr. Carl Williamson of Mann-Williamson Ulcer fame.

In regard to his comments on blood loss, I believe he calls himself middle of the roader. I question the criterion of the transfusion of 3000 cc. of blood. I believe we would operate a little bit sooner than that, here.

I was particularly intrigued by his description of the transesophageal, transabdominal ligation of esophageal varices. I saw this movie which was presented in Denver last year, and this looked like a rather formidable procedure to me. I am delighted to hear that Dr. Wilkinson has tried it. I have one request to make of Dr. Wilkinson. The next time you do one of these, Doctor, would you call me and let me come down and see it or scrub with you. I should certainly like to see it. Although formidable, it seems a very sensible approach to the problem.

I certainly can't disagree with Dr. Wilkinson on his views concerning hiatus hernia and ulcer. He was hoping to stir up some controversy, but I don't think he will get any from me. I think that if the diaphragmatic hernia is repaired, the ulcer will heal.

I should like to branch out at this time, and give some other methods of treatment. We've been talking mainly about gastric resection, which I personally favor. If we could regard for a few minutes, vagotomy or various operative variations, dispassionately, I think it might be a good idea. There is much disagreement still, between the gastric resectionist and the vagotomist. A lot of us get very emotional when we discuss the problem. Personally, I'm a gastric resectionist.

Weinberg of Los Angeles, recently published an article which appealed to me, and I should like to read about his next 100 cases and how they come out. He is advocating in the case of massively bleeding duodenal ulcer, merely opening the distal portion of the stomach through the pylorus into the duodenum and securing bleeding points with suture ligatures. He then does a pyloroplasty and a vagotomy. He didn't say just how easy it is for him to do this, but he considers it a great time saving procedure and his results in his first 24 cases are impressive. In his first 24 cases treated by this manner he had no deaths. All of these were serious bleeders by the criteria which we accept. No deaths in 24 consecutive cases is an accomplishment. There was only one case in which he had serious complications. This one bled postoperatively, had to be reoperated twice, and the patient finally had a gastric resection and survived.

I should also like to say a bit about the so-called blind gastrectomy. I have been a little bit disconcerted by that term. You've probably read about it. I cannot understand the rationale behind this. Possibly Dr. Wilkinson and Dr. Goodrich would say more about it, later. I see absolutely no contraindications to doing a gastrotomy. In fact, I can't see that it adds any great hazards to the operation, and I personally like to know where

the bleeding is coming from, if I possibly can find out.

To get back to some of the cases that were presented. In the literature, usually the statement is made that in about 10 per cent of the cases that are bleeding massively from the upper gastrointestinal tract, no definite ulcer can be found. One finds only so-called erosive gastritis or hemorrhagic gastritis. That is not our experience here. I have not had time to look up all of our cases but I would say that our percentage is much higher than that. These are the disappointing, frustrating cases where no ulcer can be found.

The stomach is opened and one hopefully tries to discover something in the stomach and only erosive gastritis is found. In such cases, frequently the imagination is stretched to find even that. If an erosion is found, one marks it carefully, and quickly goes to the pathologist before he has a chance to pickle the specimen and says: "Here is the ulcer—don't forget where it is." It seems to me we have had a large number of those. Possibly we shouldn't be operating on them, but the ones we've operated on have all fulfilled the criteria for emergency surgery.

I should like to bring up one more point. That is, the ideas of Dr. Stewart of Buffalo. Dr. Wilkinson did not have time for this, but I think his ideas are well worth reporting, and many of us have been following his results for a number of years.

Dr. Wilkinson will probably remember a meeting which we attended in Dallas, I think six or seven years ago. Dr. Stewart was present and he propounded some of his ideas. Dr. Stewart, I might add, advocates immediate emergency operation on all upper gastrointestinal bleeders, that is, those patients bleeding from gastric or duodenal ulcers.

He has definite criteria for the classification of an acute bleeder. The patient has to have lost over 40 per cent of his total circulating red cells before he is placed in the emergency class. Stewart's first paper on this subject appeared in 1950. It was revolutionary and caused many gasps throughout the country.

As you probably know, if these patients are treated medically the mortality is anywhere from six to fifteen per cent depending upon the age of the patient and other circumstances. When Dr. Stewart first published his series he stated that his mortality was about eleven per cent and medical mortality was twelve per cent. Everybody said, well, you haven't accomplished very much, have you? He has continued to study this throughout the years and his series has reached 193 cases.

He has a carefully trained team, and can now delegate some of the operations to the residents. They have a definite routine, with specialized personnel in the operating room, both day and night. He has as ideal a situation for dealing with these cases as anybody could have and a well trained team. Out of his first 193 cases, the mortality of the patients under 50 years of age was three per cent. In those over 50 years of age, the mortality was eighteen per cent. I believe that anyone who can report a mortaliy of three per cent in acute bleeders—and many of these are practically exsanguinated when they're taken to surgery—is doing well. I think his results are very good and certainly deserve further consideration.

(Due to a recording breakdown the discussion which followed this seminar was lost.)

Bibliography (Dr. Wilkinson)

1. Rogers, J. C. T.: Diagonal incision for upper abdomen, Surg., Gynec. & Obst. 92: 698 (June) 1951.
2. E. Stanley Crawford, M. D., Walter S. Henly, M. D., John Kelsey, M. D.: Ligation of esophageal varices: A new technique. American Surgeon, 25, 805, 1959.
3. Zollinger, Robert M., and Ellison, Edwin H., Primary peptic ulcerations of the jejunum associated with islet cell tumors of the pancreas. Annals of Surgery. 142: 709-728, 1955.

Urology Award

The American Urological Association offers an annual award of $1,000 (first prize of $500, second price $300, and third prize $200) for essays on the result of some clinical or laboratory research in Urology. Competition is limited to Urologists who have been graduated not more than ten years, and to hospital internes and residents doing research work in Urology.

The first prize essay will appear on the program of the forthcoming meeting of the American Urological Association, to be held at the Hotel Biltmore, Los Angeles, May 22-25, 1961.

For full particulars write the executive secretary, William P. Didusch, 1120 North Charles Street, Baltimore. Essays must be in his hands before December 1.

Use of Perphenazine Orally or Parenterally Among Nonpsychotic Patients

By Robert J. Antos, M.D.,* *Phoenix*

The clinical effectiveness of perphenazine,* a ring-substituted phenothiazine, has been described by numerous investigators. In addition to its use among hospitalized psychiatric patients, perphenazine is indicated for the management of tension and anxiety associated with somatic illness in ambulatory patients.[1-4] The marked antiemetic potency of this drug was described by Wang[5] after controlled comparative studies among animals and confirmed in clinical practice.[6-8] Perphenazine is available for injection intramuscularly or intravenously, in tablets, and as suppositories. The intent of the present study* was to determine optimal dosage parameters with the various routes of administration.

Methods

Nonpsychotic patients with nausea and/or anxiety symptoms arising from toxicity, pregnancy, organic disease, or psychogenic disturbance were treated with perphenazine. Injectible perphenazine was studied in fifty patients with severe emesis for whom oral medication was not feasible. Ten received an inert injection, 20 received 5 mg. perphenazine, and 20 received 10 mg. The attending physicians did not know which patients received the active drug or which dose was used. The double-blind code was broken after physicians recorded the patients' response.

Ten patients were treated with oral perphenazine for anxiety or emesis. Each patient received a placebo and single doeses of perphenazine, varying between 2 and 12 mg., at intervals during the period of study. Information about the amount of perphenazine administered each time was withheld from the patients and their attending physicians.

Trilafon suppositories were used in ten patients. A placebo was not used in this group but the patients received either one or two suppositories and variations in results were correlated with dosage.

Results

Injectible perphenazine: Of the ten patients who had received the placebo, six stated that they had been partially relieved of symptoms. Four of the 20 patients who had been given five mg. perphenazine experienced complete relief and the others were partially benefited. Only two of the 20 patients who received 10 mg. failed to experience complete relief; one patient felt very slight nausea and the other noted slight bloating.

Perphenazine orally: Six of the ten patients had a "positive" response to the placebo and the same patients also were relieved to some extent after administration of the two mg. tablet. On four mg. daily more patients experienced partial relief but none was completely relieved. When the dosage was increased to six mg. or 10 mg., there was a notable difference between the actual therapeutic effect of the drug and the expected placebo reaction. On single administrations of 12 mg. perphenazine, five patients were completely relieved of symptoms and five reported major improvement.

Perphenazine suppositories: The eight mg. suppository provided complete relief to only two patients, six were benefited to some degree, and two did not respond. Two suppositories provided substantially better results and no patient failed to obtain at least some degree of relief. Results appeared to be somewhat better if several hours elapsed between administration of the first and second suppositories. Some patients found that results were best when one suppository was used after dinner and the second before bedtime. Pregnant patients obtained substantial relief of morning emesis by using one suppository at bedtime and another early in the morning.

The results of our trials among the various groups of patients are summarized in the table.

*Director of Research, Good Samaritan Hospital.

*Perphenazine (Trilafon) was provided for this study by R. Richard McCormick, M.D. of the Medical Research Division, Schering Corporation, Bloomfield, New Jersey.

Response to Perphenazine in 70 Patients

Experimental Administration	Complete Relief	Partial Relief	Slight Relief	No Relief
INJECTIBLE PERPHENAZINE (50 PATIENTS)				
Placebo (10 patients)	—	6	—	4
5 mg. (20 patients)	4	16	—	—
10 mg. (20 patients)	18	2	—	—
PERPHENAZINE ORALLY (10 PATIENTS)				
placebo	—	6	—	4
2 mg.	—	6	—	4
4 mg.	—	8	—	2
6 mg.	2	8	—	—
10 mg.	3	7	—	—
12 mg.	5	5	—	—
PERPHENAZINE RECTALLY (10 PATIENTS)				
one 8 mg. suppository	2	5	1	2
two 8 mg. suppositories	4	5	—	—

Comment

The "placebo effect" exhibited by several patients after administration of the inert agent was not surprising; other investigators have reported an incidence of "positive" response to placebos of 50 percent in a series of psychiatric patients[9] and of 70 percent among a group of patients with gastrointestinal symptoms.[10] We believe that a valid statement about the beneficial action of a drug can be made if the response to it is unequivocally better than to a placebo among the same or matched patients. In the present study, the lower doses of perphenazine did not produce results significantly better than those produced by the placebo; when the higher doses of perphenazine were used, a pronounced therapeutic effect was observed.

Conclusions

1. The optimal therapeutic dose of perhenazine via injection is 10 to 15 mg.

2. Optimal results with oral perphenazine occur after doses of 10 to 12 mg.

3. Two suppositories of 8 mg. perphenazine provide optimal results with this route of administration.

Summary

The double-blind method was used to study injectible perphenazine in 50 patients, oral perphenazine in 10 patients, and perphenazine suppositories in 10 patients. Anxiety or emesis, irrespective of cause, was relieved rapidly in almost all patients on doses of 10 mg. orally or by injection or 16 mg. in suppositories. On lower doses the results are not significantly better than those obtainable with placebos.

References

1. Ayd, F. J., Jr.: Tranquilizing drugs in private practice. New York J. Med. 57:1742-1747 (May 15) 1957.
2. Ernst, E. M. and Snyder, A. M.: Perphenazine in nausea and vomiting, and anxiety states. Pennsylvania M. J. 61:355-359 (March) 1958.
3. Marangoni, B. A.: Use of a new tranquilizer, perphenazine, in 60 patients with anxiety and tension. Am. Pract. & Digest Treat. 8:1959-1961 (December) 1957.
4. Preisig, R. and Landman, M. E.: Use of perphenazine in anxiety states and hyperemesis—report of 135 cases. Am. Pract. & Digest Treat. 9:740-744 (May) 1958.
5. Wang, S. C.: Perphenazine, a potent and effective antiemetic. J. Pharmacol. & Exper. Therap. 123:306-310 (August) 1958.
6. Birnberg, C. H.; Schwartz, A. A., and Wiener, S.: Perphenazine suppositories in nausea and vomiting of pregnancy. Am. J. Obst. & Gynec. 77:438-441 (February) 1959.
7. Gready, T. G., Jr.; Estrada, W. J., and Haden, J.: Intramuscular perphenazine in labor. Am. J. Obst. & Gynec. 77: 412-419 (February) 1959.
8. Homburger, F.: Perphenazine as an antiemetic agent in cancer and other chronic diseases. J.A.M.A. 167:1240-1241 (July 5) 1958.
9. Gliedman, L. H.; Nash, E. H.; Imber, S. D.; Stone, A. R., and Frank, J. D.: Reduction of symptoms by pharmacologically inert substances and by short-term psychotherapy. Arch. Neurol. & Psychiat. 79:345-351 (March) 1958.
10. Tomenius, J.: The double-blind test in the evaluation of the therapeutic effect of drugs. Am. J. Digest. Dis. 3:411-415 (May) 1958.

Texas Post-Graduate School to Meet Sept. 18 in El Paso

A one-day course on preoperative and postoperative treatment will be given at the Turner Home of the El Paso County Medical Society Sunday, Sept. 18, as part of the University of Texas Postgraduate School of Medicine series.

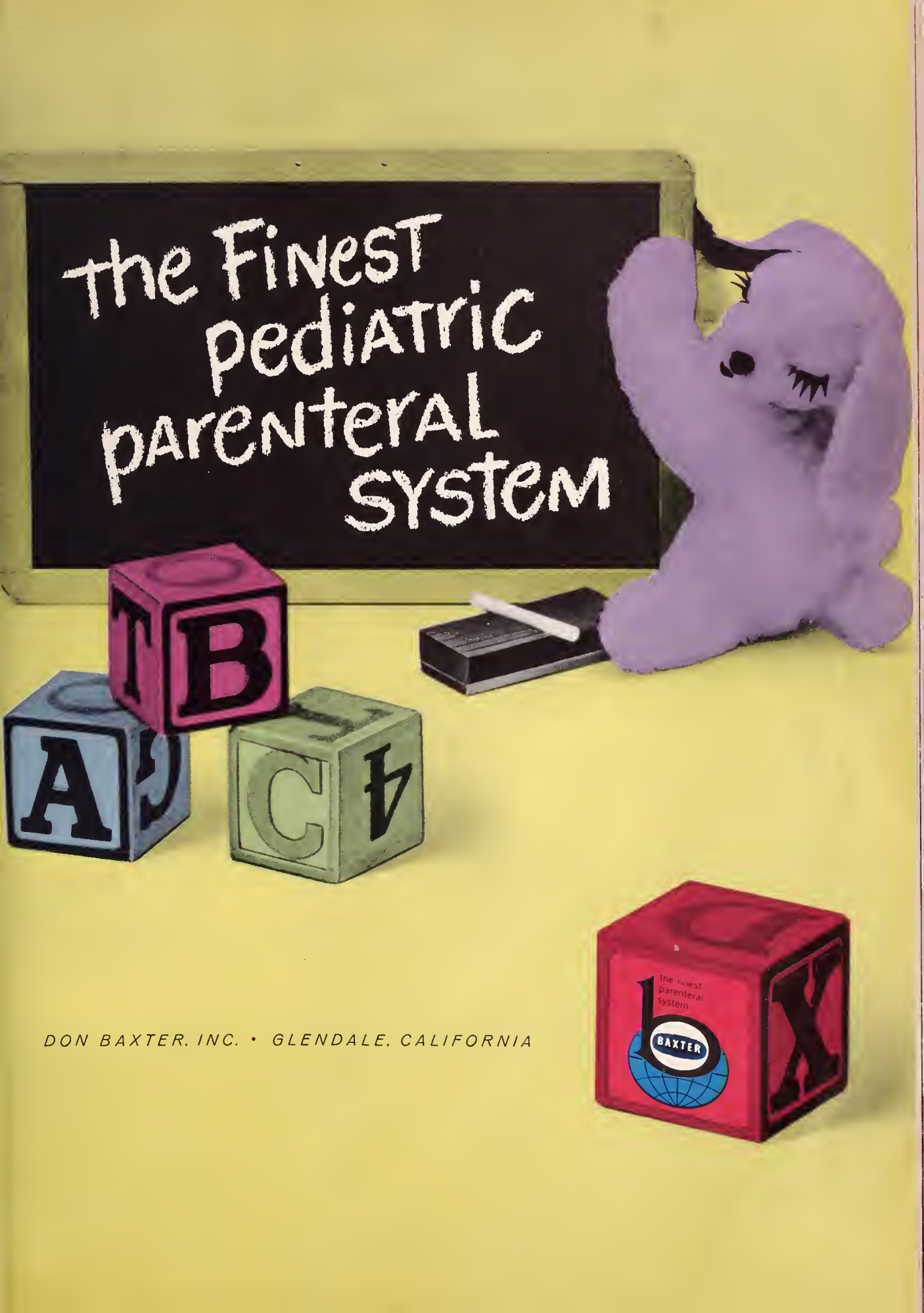
The six-hour course will include talks by Dr. Donald B. Butler and Dr. O. A. Fly, Jr. of Houston together with six El Paso physicians: Dr. Gerald H. Jordan, Dr. M. D. Thomas, Dr. Charles E. Webb, Dr. M. S. Hart, Dr. William G. Smith and Dr. John E. White.

Dr. Butler will open the session with a talk on diagnosis and treatment of small bowel obstruction and Dr. Fly will discuss large bowel obstruction.

Intestinal surgery in the poor risk patient will be the subject of a panel discussion to conclude the morning session while a panel discussion on new developments in the management of cancer of the colon will follow individual talks on the subject in the afternoon.

The course has been approved by the Texas Academy of General Practice for six hours Category I credit. Advance registration is requested. Complimentary enrollment will be granted to residents, interns and faculty members upon satisfactory completion of application blanks.

Dr. J. Leighton Green is director of the El Paso Division of the University of Texas Postgraduate School of Medicine.



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Patriotism

By Russell L. Deter, M.D., *El Paso*

President, Southwestern Medical Association

The Fourth of July has come and gone. This was the day we were supposed to celebrate the founding of this great country of ours. This was the day we were supposed to wave the Stars and Stripes; be proud of our heritage; be proud of those thirteen stripes representing the original thirteen colonies that, with vision and hope and faith, discarded the yoke of oppression and tyranny and became the United States of America; proud of those thirty-seven stars which represent the states which chose to join the original thirteen to become, on the Fourth of July, 1960, the fifty United States of America joined together in a government "of the people, by the people, for the people." This was the day we should again reassert our faith in the right of man to live in dignity and freedom from oppression.

Why do I say, "we were supposed to" and "we should have"? Too many people in this country have become cynical about patriotism and "flag wavers." They think it is childish and "kid stuff." They have even passed on this feeling to their children; and, in too many instances, to their elected representatives, leaving the impression, both nationally and abroad, that the people of this country are only interested in "what's in it for me?" or, "how much can I make out of it?"

The Sawdust Trail

The time has come for all of us to hit the sawdust trail and go down to the "Amen" corner and reaffirm our faith in the Constitution of the United States and the principles of democracy. Let us stop this business of belittling our armed forces and individuals who choose it as a career. Let us honor this proud profession that has been the nucleus of the forces which have preserved the principles of democracy since the first Fourth of July.

Let us discredit the so-called "changeocrats" who are not satisfied with the time-honored and proven principles of patriotism, morality, honor, ad infinitum, but want to change everything. They back away from the fires that have warmed the hearts of nations, people, families and individuals for centuries. They are taking off in all directions, destroying or attempting to destroy that cohesive force that keeps us driving towards our ultimate goal of freedom of man from oppression and war. That cohesive force is pride in family, pride in city, state and country. Are you ashamed of being an American? Are you a "changeocrat"? Do you thing that our fate is inescapable? The Freudian ethic, as published in the Readers' Digest, says:

"All talk of social destiny and inescapable faith is simply a symptom of general unwillingness to make the effort to do and keep doing what is necessary to maintain our way of life. If man fails in the battle with the bugs, is overwhelmed in a flood of babies, runs out of top soil, smothers in smog, or if someone in the various other ways fails to solve the problems of social adaptation, it will only be because he has given up trying."

Birthright Sold

Have we sold our birthright to the "changeocrats?" Have we given up trying? Are circumstances to which we object in national government there because of your default in not voting; in not taking leadership in your precinct meetings; in not letting your elected representatives know your opinion on national and international issues? Is it because *you* have forgotten what patriotism means? Patriotism is love of country, devotion to the welfare of our country. Have we become so enamoured with ourselves, and so devoted to our own welfare that we have forgotten that how our country goes, so shall we? Let us revive patriotism, let us wave "Old Glory" proudly again. Let us take the leadership in our precinct meetings and on up to revitalization of our national government.

Have we forgotten that the reason history repeats itself is because too many were not listening the first time? Other democracies in history failed because of the complacency of its people. If our national government is not what we want it to be *have we really quit trying? HAVE YOU?*

CPC

Clinical Pathological Conference

R. E. Thomason General Hospital, El Paso

F. P. Bornstein, M.D., Editor

Case No. 1428, April 21, 1960

Presentation of case by Robert H. Thayer, M.D.

History: Dr. Nathan Kleban

Abdominal pain and constipation for three days brought a 70-year-old Latin-American woman to the hospital on March 17, 1960.

Various historians dated onset of episodes of abdominal pain back 14, 20 or 25 years, occurring about every three or four years, accompanied at times by vomiting, and not affected by intake of food. Location of the pain was right upper abdominal quadrant or epigastrium. One historian related that the pain was present off and on in the epigastrium for three years, that a hernia was repaired in 1942, and that the pain did not recur until three years before admission, since which time it had been recurring more frequently, persisted for longer periods, and was increasing in severity. Jaundice was noted some months before admission.

First admission to this hospital was January 23, 1960. Blood pressure was 210/110, later ranged from 180/90 to 90/50. Temperature reached 102 on the second day, ranged around 100 for several days, then dropped below 99. There was slight epigastric or right upper abdominal quadrant tenderness, absent umbilicus, and herniorrhaphy scar. The liver edge was felt three finger breadths below the right costal margin.

Treated With Analgesics

The patient was treated with analgesics, parenteral electrolyte solutions, tetracycline, and an anti-cholinergic drug. Except for a single complaint of cramping there was no abdominal pain after the first day and no vomiting after the second day. Treatment was for gastric ulcer.

The patient was discharged on February 6 on an antacid preparation. It was planned to repeat X-rays in four weeks and perform surgery if the ulcer had not healed.

On February 11, 15 and 29 and March 7 and 14 the patient was seen in the clinic, free of symptoms.

On March 17 the patient was brought to the emergency room. She complained of abdominal pain of increasing severity for three days, jaundice, anorexia, vomiting, distention, weakness, joint pains, weight loss, tenesmus and inability to move her bowels, despite 12 soap suds enemas.

Physical Examination

T. 100; R. 42; P. 95; B. P. 80/60.

The patient was obese. She appeared jaundiced. The heart was slightly enlarged. Deep palpation in the epigastrium evoked slight tenderness. The liver was enlarged. There was abdominal distention. There were "palpable masses."

Hospital Course

Although the patient refused an enema in the emergency room, one was given shortly after she arrived on the ward. Return solution was colored but contained no feces. Jaundice deepened, respirations became labored and blood pressure dropped. The patient went into coma and died on March 19, 1960.

Laboratory Findings (First Admission)

X-Rays: 1-23-60: Chest—Conclusion: The chest is essentially normal in appearance, slight cardiomegaly cannot be excluded. Old arthritic changes are described in the left shoulder.

1-26-60: GB and GI series: Gall bladder series showed non-visualization, probably on the basis of calculus cholecystitis; no opaque calculi were demonstrated. Changes indicative of partial obstruction of the duodenum in its third portion,

possibly related to a superior mesenteric artery syndrome are described. Re-examination for further evaluation of this segment of the intestinal tract is recommended. The radiographic appearance of the chest is within normal limits for a patient of this age.

2-2-60: Re-examination of the upper GI tract now reveals a gastric ulcer lying on the lesser curvature. There is no evidence of duodenal obstruction.

Conclusions: Gastric ulcer.

Blood Counts:

1-23-60: WBC 15,200, Hb. 14.7 gms., Ht. 48%, Segs. 82, Lymphs. 18.
1-28-60: WBC 8,500, Hb. 13.3 gms., Ht. 42%, Stabs. 3, Segs. 69, Lymphs. 25, Monos. 2.
1-30-60—WBC 7,600, Hb. 12.4 gms., Ht. 40%, Eosin. 1, Juveniles 1, Stabs. 7, Segs. 52, Lymphs. 39.
2-5-60—WBC 8,300, Hb. 13.3 gms., Ht. 41%, Eosin. 1, Stabs. 2, Segs. 65, Lymphs. 28, Monos. 4.

Prothrombin time:

1-30-60: 95%—Patient 14.5", Control 14".

Urinalyses:

1-23-60: (Catheterized) — Straw, turbid, alkaline, S.G. 1.010, Albumin and sugar, acetone, diacetic acid, negative; WBC 3-4, Ep. cells 2-3, casts, 1-2, bacteria, non-motile rods, 3+.
1-27-60: Straw, clear, alkaline, S.G. 1.006, Albumin trace, sugar negative, few bacteria:

Feces:

1-26-60: Occult blood 3+.
2-2-60—Occult blood 2+.

Serology:

1-25-60—Negative.

Chemistry:

1-23-60: Amylase—108; Glucose—118; Urea Nitrogen—9.0
1-26-60: Amylase — 22; Co_2 capacity — 20 mEq/L; Chlorides (as NaCl)—88 mEq/L; Potassium — 3.8 mEq/L; Sodium — 124 mEq/L.
127-60: Calcium—4.3 mEq/L; Co_2 capacity—18 mEq/L; Chlorides (as NaCl) — 100 mEq/L; Potassium—3.6 mEq/L; Sodium—136 mEq/L; Van den Bergh direct—.116; Indirect—.29.
2-5-60: Calcium—4.8 mEq/L; Chlorides (as NaCl)—98 mEq/L; Potassium—4.9 mEq/L; Sodium—137 mEq/L.

Urine culture and sensitivity:

1-26-60: No growth in 48 hours.

Laboratory Findings (Second Admission)

X-Rays: 3-17-60: Abdomen, flat and erect. Chest A-p supine; Conclusion: Abdomen negative for ruptured hollow viscus; chest, hypertensive and arteriosclerotic cardiovascular disease; no evidence of failure.

Blood Counts:

3-17-60: WBC, 19,600: Hb. 13.3 gms., Ht. 40%. Stabs. 2, Segs. 80, Lymphs. 28.
3-18-60: WBC 22,900: Hb. 13.3 gms., Ht. 43%, Stabs. 18, Segs. 74, Lymphs. 5, Monos. 3.

Prothrombin Time:

3-18-60: 25%—Pt. 20", Control 13".

Serology:

3-17-60: Negative.

Urinalyses:

3-17-60: Reddish-brown, hazy, acid. S.G. 1.014, Albumin 3+, sugar, trace, WBC 0-2, occ. squamous ep. cell, 0-1 fine casts, few bacteria, numerous urate crystals.
3-18-60: (Catheterized) Positive for bile, urobilinogen negative.

Chemistry:

3-17-60: Van den Bergh—2.85; Indirect—4.65.
3-18-60: Glucose — 33; Urea Nitrogen — 47 mg%; Amylase — 41; Total protein — 5.9 gm.%; Albumin—3.6; Globulin—2.3; A/G—1.6; Van den Bergh—3.85; Indirect—6.4.
3-19-60: Alkaline Phosphatase—11.1.

Thymol Turbidity:

3-18-60: 13.5 units.

P. P. D. # 1—(right arm):

3-17-60: Negative.

Cocci. right arm:

3-17-60: Negative.

Ceph. Floc.:

3-18-60: 24 hours 3+; 48 hours 4+.

Transaminase:

3-21-60: 190 units (SGOT).

Feces:

3-18-60: Negative for occult blood.

Sedimentation Rate:

3-18-60: 48 mm./60 minutes.

Electrocardiogram:

1-29-60: RBBB—atrial damage — ? LVA.

Clinical Discussion: Dr. Robert H. Thayer

First I will make a brief review of the case. This is a 70-year-old woman, Latin-American, who came to the hospital with abdominal pain,

jaundice, constipation of three days duration, she had had similar episodes of abdominal pain upper right quadrant, intermittently, for the past 25 years. In January of 1960 she was admitted to the hospital because of abdominal pain and fever. It was noted at that time that the liver was enlarged but there was no jaundice. The white count was elevated, suggesting an acute infection. Prothrombin time was 95 per cent and a serum bilirubin was normal. A chest film was essentially normal. Two GI series were done on this admission. The first one showed a normal stomach and a partial duodenal obstruction, possibly related to a superior mesenteric artery syndrome which is a condition where the branch of the mesenteric, superior mesenteric vessels presses against the third portion of the duodenum and causes symptoms of obstruction, sometimes pain and nausea. This is an intermittent condition and I suppose that she could have had this actually. It was not seen on the second GI series, but they did find a gastric ulcer. On this admission she also had occult blood in the stool but there was no anemia. She was treated for an ulcer and was seen subsequently five times in the clinic during the month of February, and from the history we must conclude that she was entirely asymptomatic during this time, and was not jaundiced. She was again admitted in March of this year with a three-day history of abdominal pain, jaundice and constipation. However, the X-rays failed to show any signs of obstruction or anything in the diaphragm. Could we now see the X-rays?

X-Ray Discussion: Dr. Vincent Ravel

The first film that we have here is a film following the oral administration of Telepaque and we see the opaque media in the large bowel and there is no evidence of concentration in the right upper quadrant and as usual when we see nonvisualization of the gall bladder, nine times out of 10 it is due to calculus cholecystitis, although we cannot demonstrate any opaque calculi. This is the first upper GI series and there is some dilatation of the duodenum and this caused the radiologist to feel this might be related to the superior mesenteric artery syndrome. Three days later we were able to clearly demonstrate a large gastric ulcer, high on the lesser curvature. The previously observed dilatation of the duodenum is now absent and again this is a further projection at three hours showing the ulcer on the lesser curvature. Those were the significant findings from the standpoint of the x-ray examination. The liver does not look particularly enlarged, the spleen may have caused a little impression on the greater curvature of the fundus but that again could be within normal limits. This survey film of the abdomen was done on the final admission. These are skin creases caused by the patient's obesity, and calcification in the iliac vessels, and here in the upright chest film, no free air under either hemidiaphragm. There is some prominence of the left ventricular segment of the cardiac silhouette.

Dr. Thayer:

There is no evidence of intestinal obstruction?

Dr. Ravel:

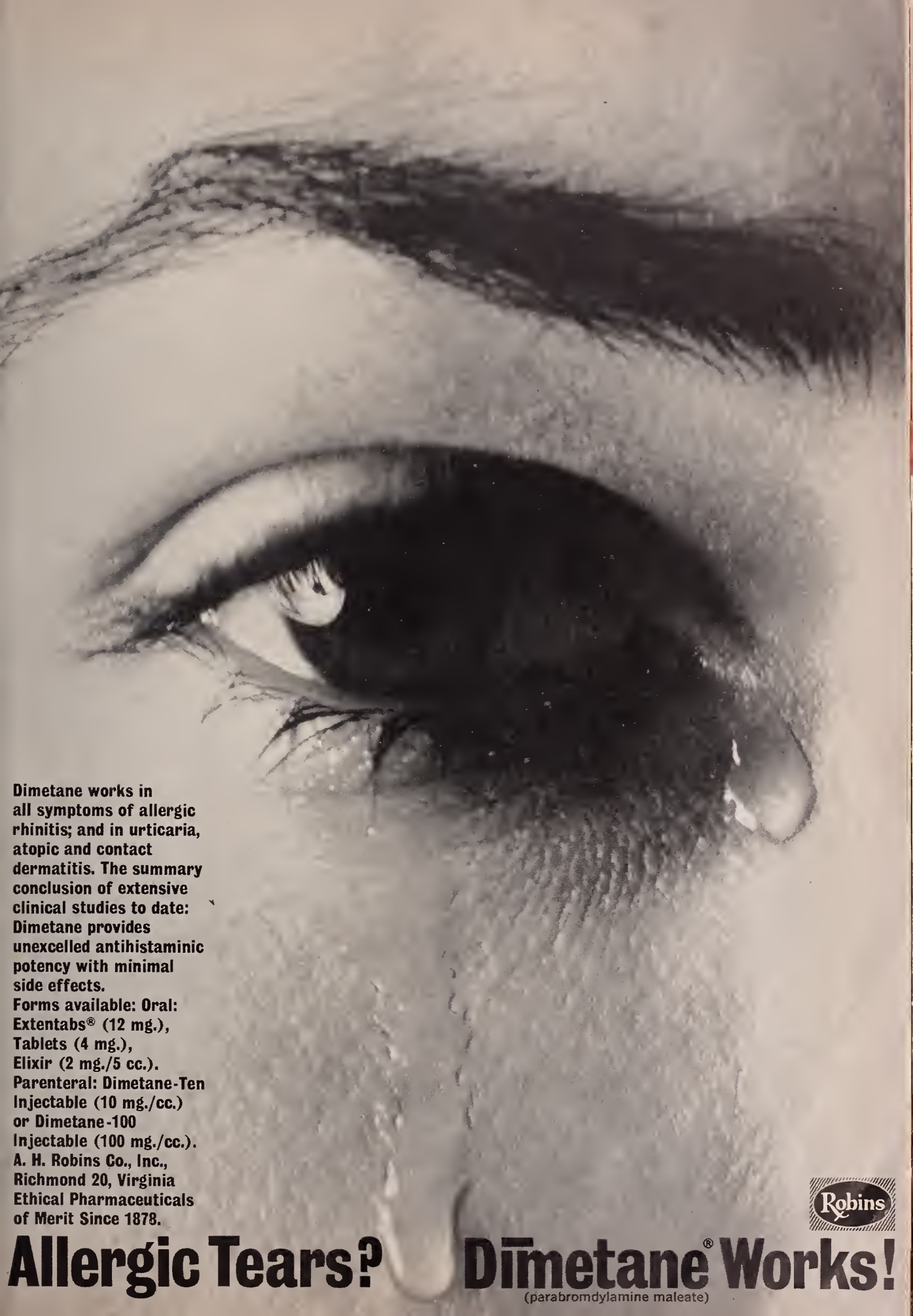
No, there is gas in the large bowel and the stomach and no evidence of ileus. The liver does not look particularly remarkable and again I cannot identify any opaque calculi, although I believe this is a case of calculus cholecystitis and possibly obstructive jaundice from cholangitis and probably hepatic failure.

Dr. Thayer:

So we have here a gastric ulcer and a gall bladder that doesn't visualize and no signs of obstruction. During her hospital stay she ran a high white count again, up to 19,000, but there was no anemia, liver function tests showed evidence of both obstructive and hepatocellular disease. Serum amylase determinations on this and on her previous hospitalization were normal. Bile was present in the urine this time, and serum transaminase was 190 which is pretty high. The stool examination was negative for occult blood on this admission and the serum proteins were slightly diminished, particularly the albumin. From the notes I gather that the patient did seem to improve and she ate all her meals on the second day and appeared to be comfortable. She had a normal colored bowel movement on the second day, which seems to be somewhat against intestinal obstruction or complete biliary tract obstruction. However, the jaundice apparently increased and on the third day she became comatose and died.

History Reconstructed

Now I have tried to reconstruct the history as best I could and the chief conclusion that I can reach is that she died in liver coma. Let us consider some of the possibilities here. Could this have been on an infectious basis? I think it is



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almost certain that she had gall stones and gall bladder disease, possibly a stone in the common duct. but I don't think this was the chief cause of her death. For one thing, she didn't run much of a fever, it was a hundred when she came in and subsequently went down to normal. Furthermore, she died too quickly, she died practically in 24 hours, so I don't think that that plays a role here. There are certain vascular lesions of the liver that can produce a rapid liver death; for one, hepatic vein thrombosis is a possibility, but this usually causes severe ascites which comes on very rapidly and they don't have too much jaundice as a rule. Portal vein thrombosis can cause a very rapid portal hypertension but there is no mention in the protocol of any signs of portal hypertension.

Malignancy Involved

Could a malignancy be involved here? I think it could but here again I don't think it is the cause of her death. It is true that cancer of the colon or stomach can metastasize to the liver and cause jaundice, and we can't say that this gastric ulcer is not malignant, yet I think that her death was too rapid for this. You will recall that she seemed to be doing very well up until three days before hospitalization and then she died in another three days. A hepatoma or cancer of the Ampulla of Vater or biliary tract, the latter two particularly, could cause obstructive jaundice, yet here again I think she died too rapidly. So I intend to discount the possibility of malignancy here as the cause of death. The only thing that I can make out is that a relatively well person died quite rapidly in what appears to be hepatic coma, so I might go over some of the possibilities here. One is a viral hepatitis which can occur at any age. Some of these, though rare, will go into a postnecrotic cirrhosis and die of acute yellow atrophy quite rapidly; and this condition seems to be particularly common in post-menopausal women.

Toxic Hepatitis

The second is that of a toxic hepatitis from some drug or poison. I reviewed her records and she wasn't taking any drug that was toxic to the liver. We don't know if she was taking any outside. The third choice, and I think this is the one that I favor, is that she has had an underlying cirrhosis of the liver due to maybe alcohol or a previous case of hepatitis, and this was precipitated into liver failure by an intercurrent infection. Therefore I am going to say in this case that she had cholecystitis and a gastric ulcer that was healing and cirrhosis of the liver, rather liver failure over cirrhosis which was precipitated by probably cholecystitis but we have to think of a perforation or any tremendous insult to the liver. Another thing could have been a perforation of the gall bladder. I think the only thing I would say is she died in liver failure, probably cirrhosis.

Dr. W. R. Gaddis:

I would like to make one comment. We have had two or three other patients with a history very much like this, who had malignancies of the gall bladder. We see a number of carcinomas of the gall bladder in this territory and we never see them in the absence of stone or evidence that a stone had been present. Three years previous to her admission this patient had a non-functioning gall bladder. These patients die rather rapidly. I think this patient could well fit in the picture of malignant disease due to chronic long-standing obstruction to the biliary tree. One other thing that struck me about the record was the wide variations in blood pressure. There have been reported instances of adrenal gland tumors, pheochromocytomas, the trigger point of which was in the epigastrium. This woman could have such metastasizing pheochromocytoma with obvious malignant degeneration. I hesitate to say that is what she had on the basis of what we know, but it certainly is an interesting possibility in view of the recorded changes in the blood pressures on this patient.

Dr. Pablo Ayub:

I would like to state that the problem here was most likely an obstruction in the common duct. One thing that seems to speak against chronic illness from a cancer is that the patient was still quite obese when she came into the hospital on the final admission. I don't think that it rules it out, but I think that it makes it less likely. I think the role of obstruction which apparently from the laboratory examination is pretty positive, is probably the beginning of the end of this patient. Apparently she must have had, like Dr. Thayer said, a chronic liver ailment upon which was superimposed an obstructive type of lesion which possibly caused enough biliary cirrhosis and possibly perforation.

Clinical Diagnosis: Gastric ulcer.

Dr. Thayer's Diagnosis: Liver failure, probably cirrhosis.

Pathological Diagnoses:

1. Chronic cholecystitis with cholelithiasis, extensive neighborhood scarring, and impingement upon common hepatic duct by stone in gall bladder.
2. Jaundice.
3. Chronic inflammation and bile duct proliferation, portal spaces of liver.
4. Septic thrombosis, radicles of portal vein.
5. Focal necroses, liver.
6. 'Tubule formation', Fasciculate zone of adrenal glands.

Pathological Discussion: Dr. John Frerichs:

The patient had jaundice, and the most pertinent findings were limited to the upper abdomen. What I first encountered was an extensive zone of scarring centering primarily around the gall bladder, with contraction of the entire neighborhood so that the duodenum, part of the stomach, the hepatic flexure of the colon, even the head of the pancreas, were pulled in, as it were, all lying closer together than would have been normal. The gall bladder was small, tightly contracted over a single stone which measured 41 x 21 mm., an olive shaped stone. There was an extensive zone of scarring that ran in almost all directions and produced what, when I first started the dissection, I thought was going to turn out to be a tumor, possibly of the head of the pancreas, but as dissection went on it became obvious as scarring, all organs being intrinsically essentially normal but variously distorted and displaced, and bound around by the mass of scar tissue. The entire biliary tree, even below where this stone was, was dilated, but the stone itself had accomplished two kinds of obstruction, even though it was inside the gall bladder. The over-all sclerotic scarring around the gall bladder had bound it down so that the stone tightly over-rode the common hepatic duct, and completely obstructed it. The bile ducts above here were greatly more dilated than the distal ducts. The portal vein, also impinged upon, contained yellowish, turbid, purulent looking blood, and some of the small to middle sized intra-hepatic radicles had septic thrombus material grossly, which was not present in the main trunk.

The liver itself, specially in the central part on section grossly, had the appearance of biliary cirrhosis and a general rather tawny appearance which all turned out microscopically to be the same. I am going to have trouble explaining the stomach to at least one member of the group, namely, Dr. Ravel, since—although I knew of the X-ray finding of ulcer and looked meticulously—there was no ulcer at autopsy. The stomach being examined in the fresh condition, I was able to put the wall under considerable stretch, which will reveal any irregularities of the surface as well as thickening of the wall or ulceration, and at the time of death there was nothing abnormal. I would tend to wonder more, though, from the general relationships which are impossible to show on pictures, if the distortion and the general pulling around of the organs had not pulled this particular segment of stomach either around the edge of the liver, around the edge of this nodular scar, or in any event in some fashion to produce the appearance of an ulcer on the X-ray.

Common Duct Dilated

Here is a gross photograph which shows the bile ducts, this being duodenum, the common duct itself is dilated and here is the small gall bladder, more or less displaced, with the large stone. The gall bladder wall is reduced to a fibrous shell around this stone. The next is another view of the same thing. Here is the stone. Here the stone is removed, you can see the gall bladder lining. As noted, the entire biliary tree was dilated, and the ampulla easily passed the scissor bill which was at least three times the normal size of the ampulla. This shows the entire specimen with the gall bladder retracted; beginning about here is the take-off point of the cystic duct, so that this is the common hepatic duct and here are the right and left major ducts from the liver, disporportionately large as compared with the rest of the tract. You can also see the fixed appearance of the liver, with pigmented spots surrounded by grayish-tan connective tissue, yet the liver was not actually cirrhotic microscopically.

Portal Spaces

Microscopically one can see the portal spaces are considerably thickened with bile duct proliferation and a lot of round cell infiltration, some cells which look like fibroblasts but without collagen production, and without interruption of the liver lobulation; the lobulation is if anything more plainly visible than usual, and this is probably prior to anything that one ought to call obstruc-



Figure 1

Gallbladder with stone, reflected upward, showing below it the area of impingement on the common hepatic duct.

tive cirrhosis, although clearly the change was going in the direction of reaching this entity. There is question about when to start using the label of cirrhosis, and personally I think that unless there is good collagen in the area, and diagonal or considerable interruption of liver lobular pattern, one should not call it cirrhosis. There was no ascitic fluid at autopsy, either. The next picture shows another low power of the liver to show one of the smaller septic thrombi in a radicle of the portal vein.

Thrombus Material

I do not know how clearly one can see that it is thrombus material but microscopically it clearly is in any event, and contains an unusually large number of leucocytes with break-down of the leucocytes and some break-down of the thrombus material itself. There were not large numbers of these in the liver but obviously enough to have caused some trouble elsewhere and not visible on a gross basis. There were numerous little foci of hepatic necrosis of which this is one, surrounded by relatively normal liver cells. In general the liver cells look healthy, but with the tiny foci of septic death, with both mononuclear and polymorphonuclear inflammatory cells, these I would relate also most likely to septic thrombosis of the portal vein. While these are fairly numerous, they are not enough to be directly responsible for her death.

The lungs did not show any pneumonia. Despite the excruciating history of attempts to get fecal material out of the patient, the intestine was loaded with it at autopsy, with hard, formed feces even in the cecum and all around the ascending, transverse and most of the descending colon. It was totally acolic stool. There was also some little hemorrhagic areas in the intestinal mucosa without ulceration. The endometrium was bloody as well, perhaps indicative of an early hemorrhagic diathesis incidental to her liver lesion.

Adrenal Gland

Here at last is the adrenal gland, and herewith the reason she died in the fashion and at the time she did. If you regard something like this as a normal fasciculate zone cell cord, the contrast between it and such structures as these, which are tubular or pseudo-tubular, is startling. What happens in the process is that the cord itself develops a lumen in its middle, where normally there is none; a little serous fluid is sometimes visible in this, as here, and occasionally inflammatory cells or necrotic cortical cells desquamate into the lumen of the tubules. This patient had a moderately bad case of this change, by no means as bad as

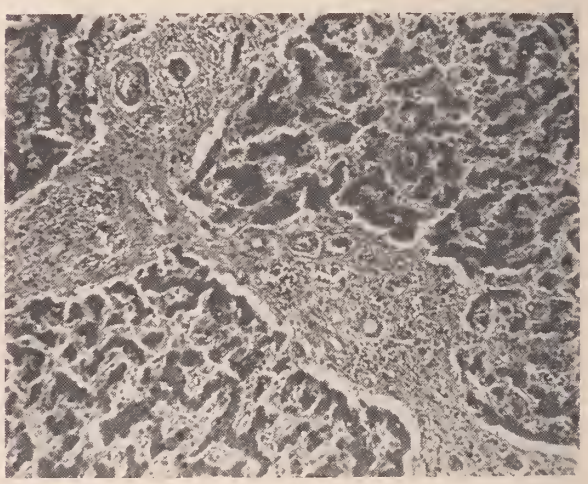


Figure 2

General pattern of liver.

they come, but on the other hand any definitely detectable degree of this change is an important finding, and ordinarily enough is taken to account for death.

This is the sort of lesion which has been described off and on for the last 50 years, most recently by Rich, in the early 1940's, and then

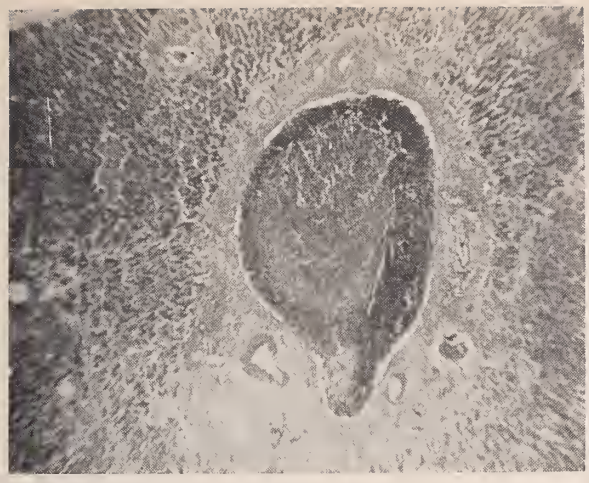


Figure 3

One of the thrombi in radicle of portal vein.

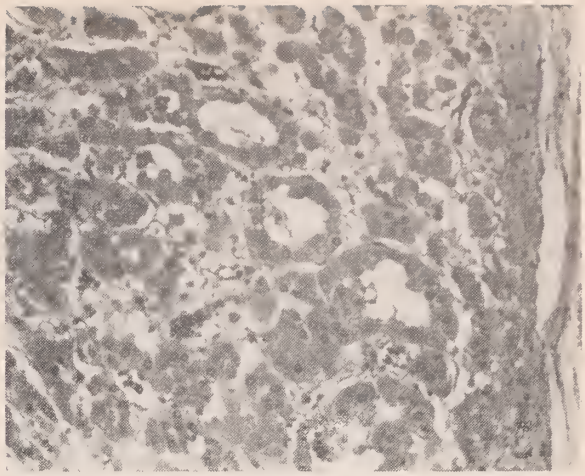


Figure 4

'Tubules' in the adrenal fasciculate zone.

relatively understandable—which it had not earlier been—due to the growing knowledge of adrenal cortical function. The change co-related with 'septic' deaths in which there was marked circulatory collapse, as appears to have been the case here, since the last recorded blood pressure is very low. The cause of the change is not clearly known, but it may come from endogenous ACTH since a change similar to it can be produced experimentally with ACTH. In terms of natural human disease it occurs with one or another kind of overwhelming infectious situation, and it does correlate with shock and sometimes with sudden death, or at least with rapid death. In this case it appears that the septic thrombosis of the portal vein and highly probably septicemia lead to the 'tubule' formation, and this was surely an adequate cause of the severe circulatory collapse, which immediately lead to death.

Dr. Kleban:

Is that associated with shock, not associated with infection?

Dr. Frerichs:

No, it seems not to be associated with pure shock, or such situations as crush syndrome, etc., in the absence of infection.

Dr. Ravel:

I note an interval of about two months between the films and death, and healing of the ulcer could easily take place in that time; I have seen them heal in 8 days.

Dr. Frerichs:

All I can tell you is I couldn't find it, or any evidence of scarring.

Dr. Kleban:

I think that as far as learning something from this patient is concerned that there is one single outstanding thing. The boys who saw this patient on her first hospital admission ignored their own history, their own physical findings, and presumably had insufficient confidence in themselves to accept the diagnosis of the radiologist. They knew that she had an enlarged liver. Well, I don't think it was important whether it was the liver or whether it was the scarring that the recurrent cholecystitis had caused, but once they got a diagnosis of gastric ulcer from the radiologist, that was their diagnosis and they thereafter paid no attention to their own findings. We all of us I think tend to do that, but they lacked confidence presumably in their own history and their own physical and accepted the radiologist's diagnosis, which proved to be a fatal mistake for this lady.

Dr. Frerichs:

I think your comment is pointed, since among other things, ulcer or no ulcer, it would hardly account for the jaundice, which was noted on the history as having existed in the past and jaundice is usaully a reasonably worthwhile symptom to look into even if it has disappeared by the time one sees the patient.

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2. Rinehart, R E., and Marcus, H: Incidence of Amebiasis In Healthy Individuals, Clinic Patients and Those with Rheumatoid Arthritis, Northwest Med., *54*:708 (July, 1955).

3. Webster, B.H: Amebiasis, a Disease of Multiple Manifestations, Am Pract. and Dig. of Treat. *9*:897 (June, 1958).

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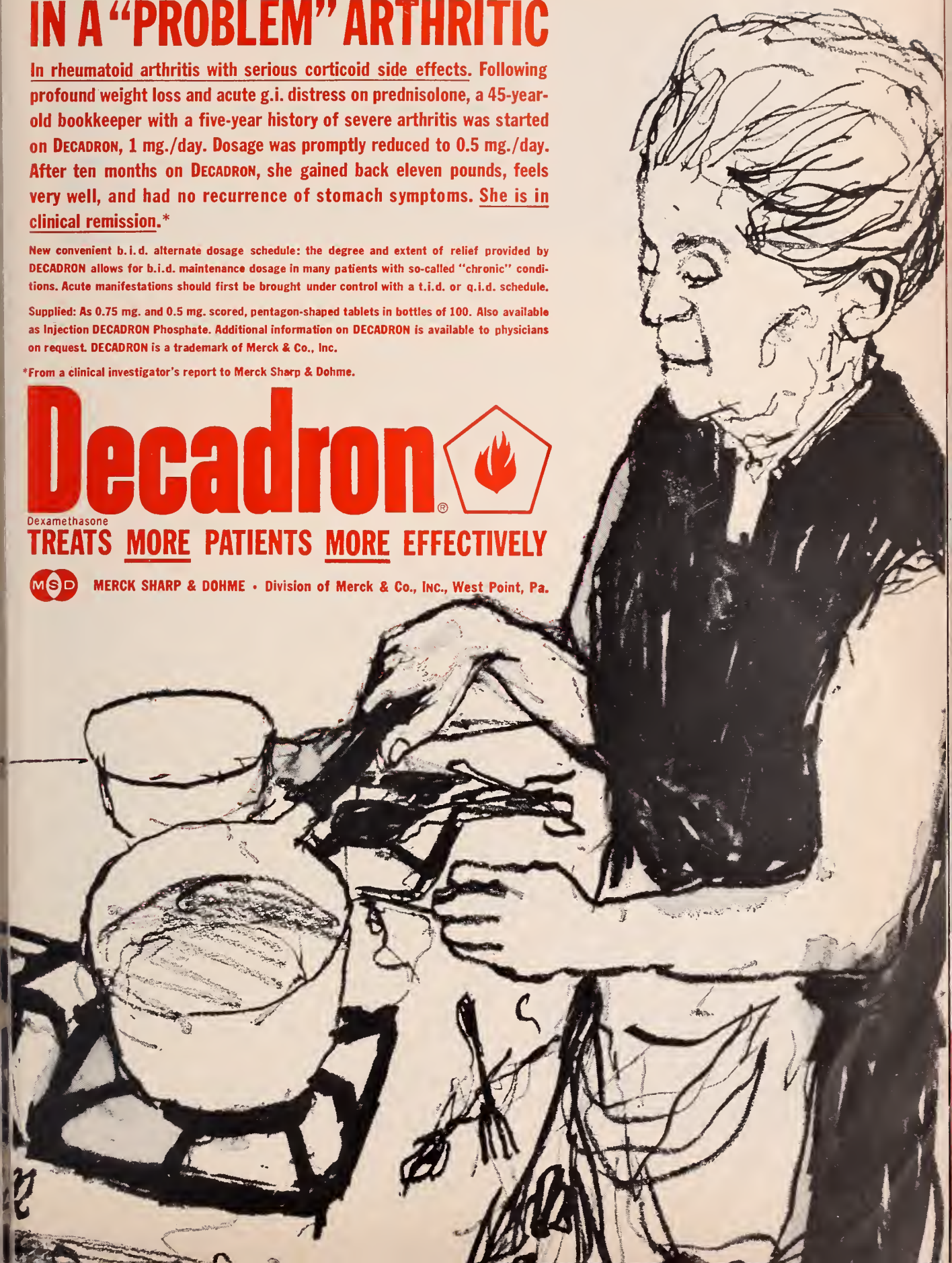
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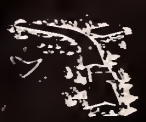
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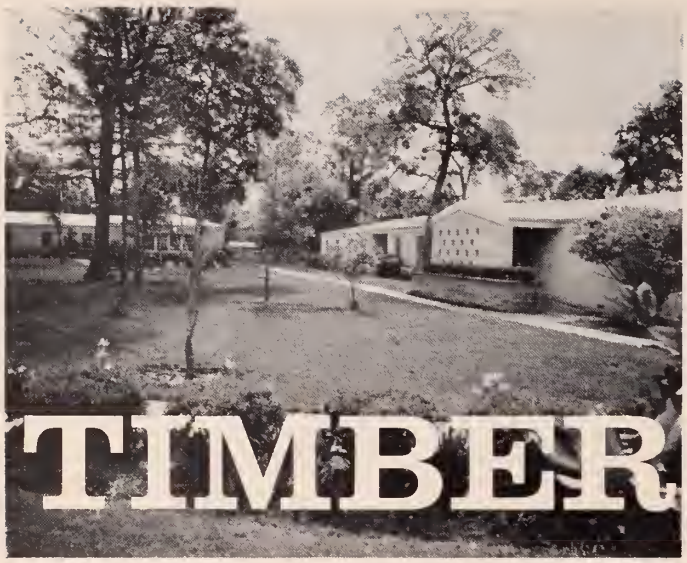
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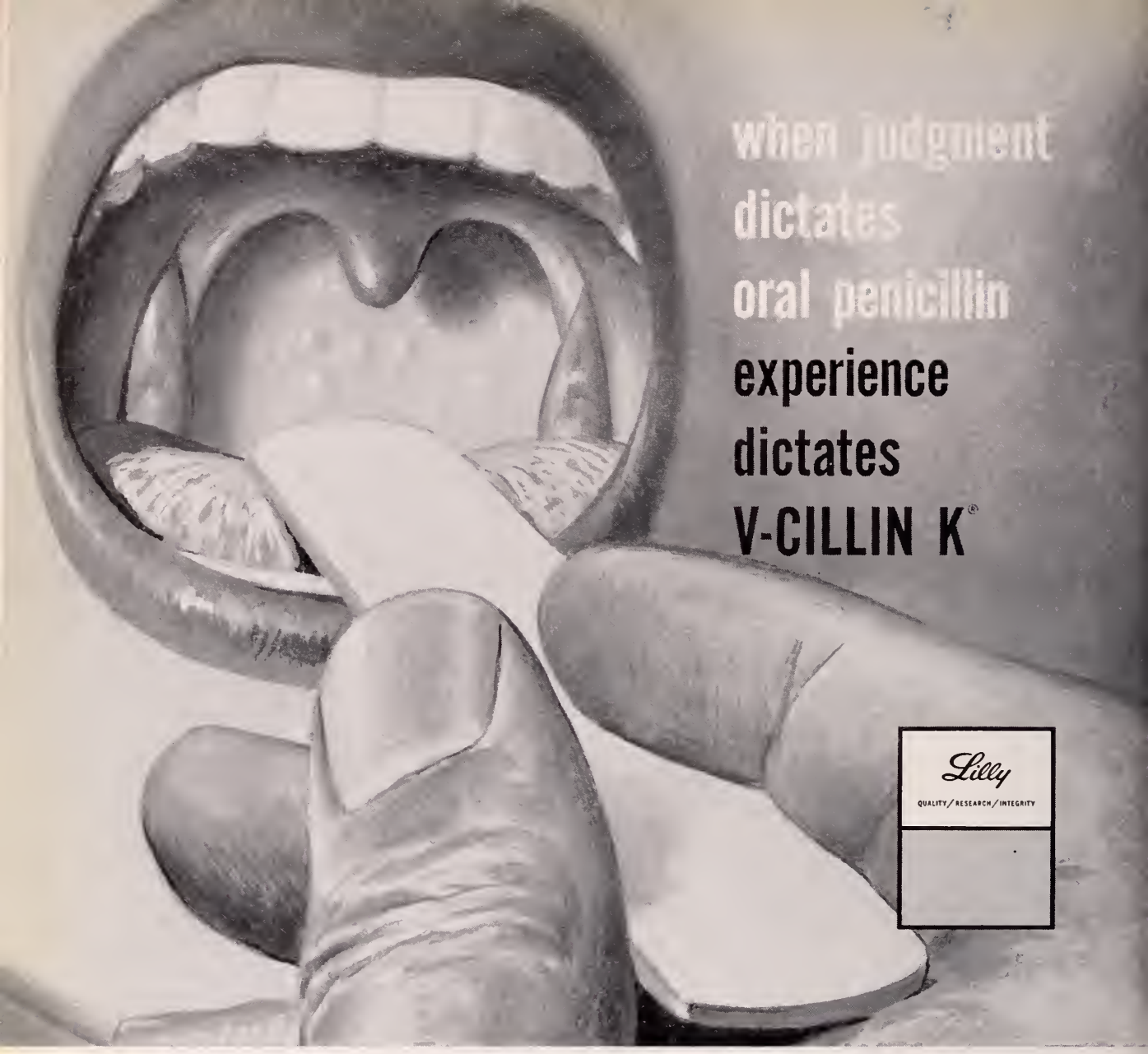
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1. Griffith, R. S.: Comparison of Antibiotic Activity in Sera Following the Administration of Three Different Penicillins, Antibiotic Med. & Clin. Therapy, 7: No. 2 (February), 1960.

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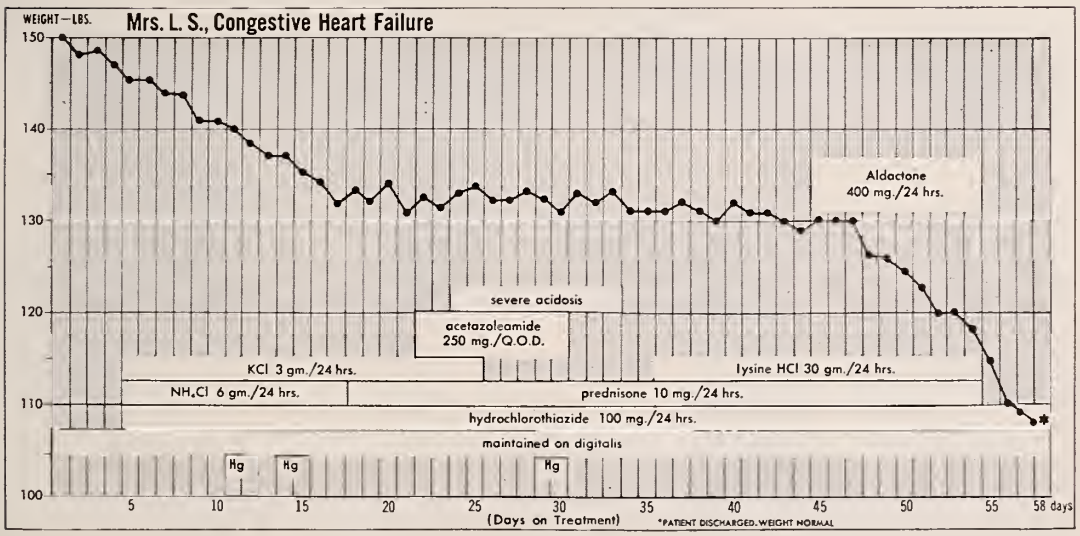
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*Coan, J. P., McAlpine, J. C., and Boone, J. A.: J. South Carolina M. A. 51:417 (Dec.) 1955. /2830MB

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1. Biegeleisen, H. I.: Clin. Med. 2:1005, 1955. 2. Roberts, J. T.: Clin. Med. 4:1375, 1957. ©1960, A.P.Co.

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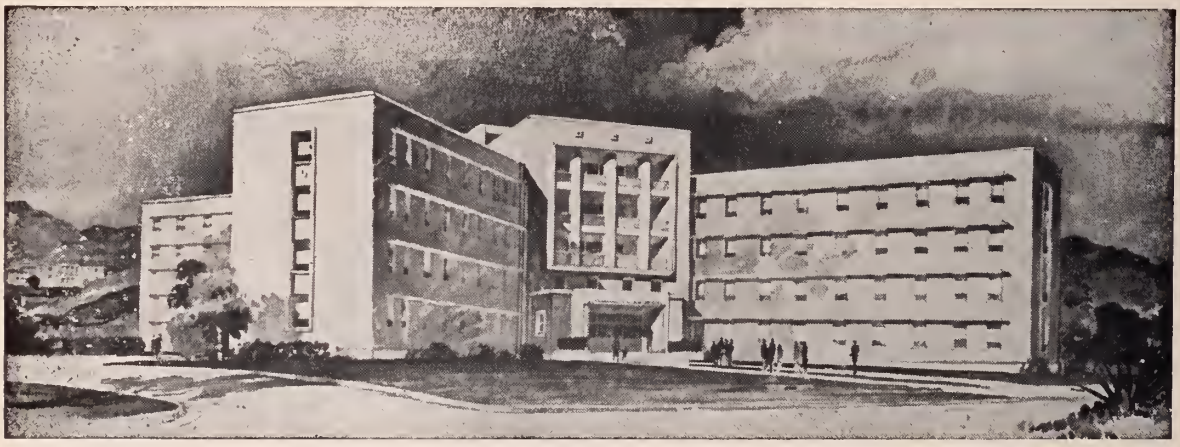
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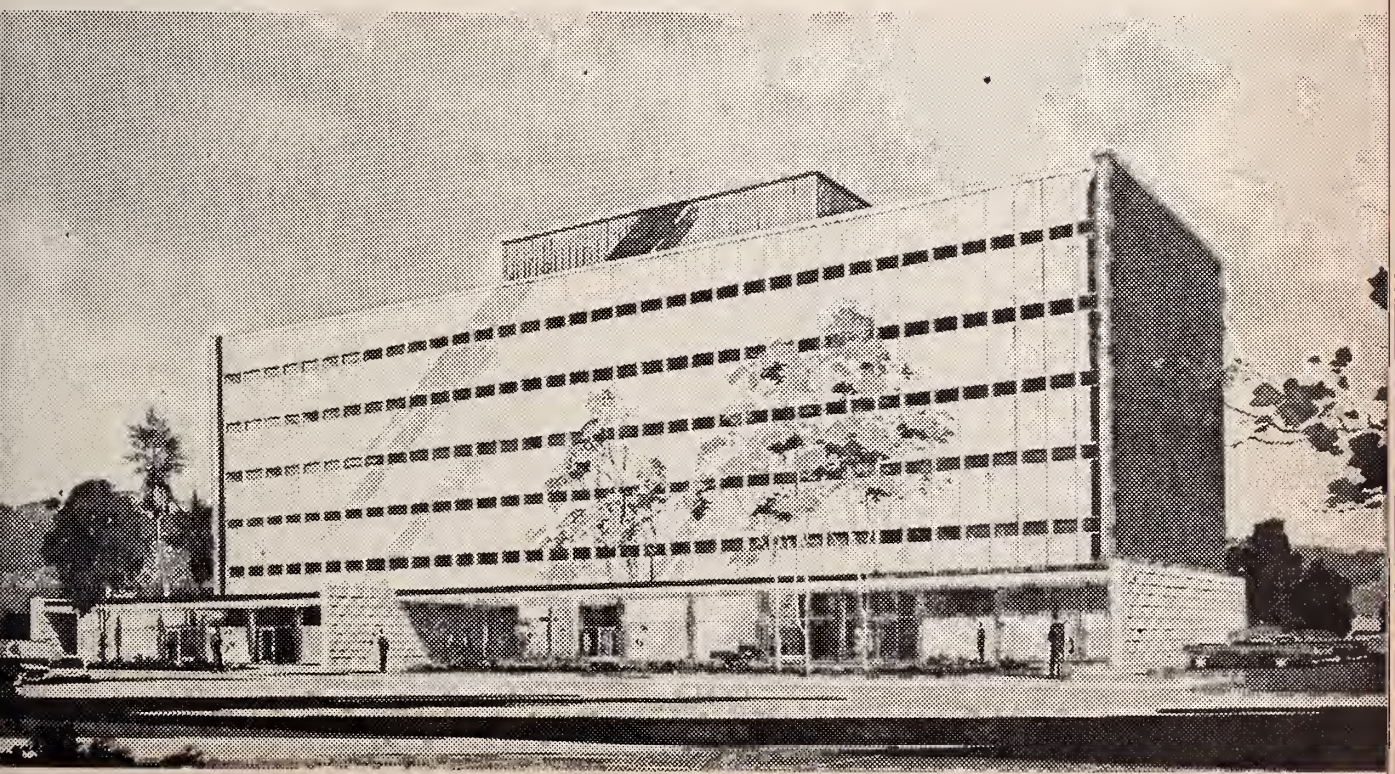
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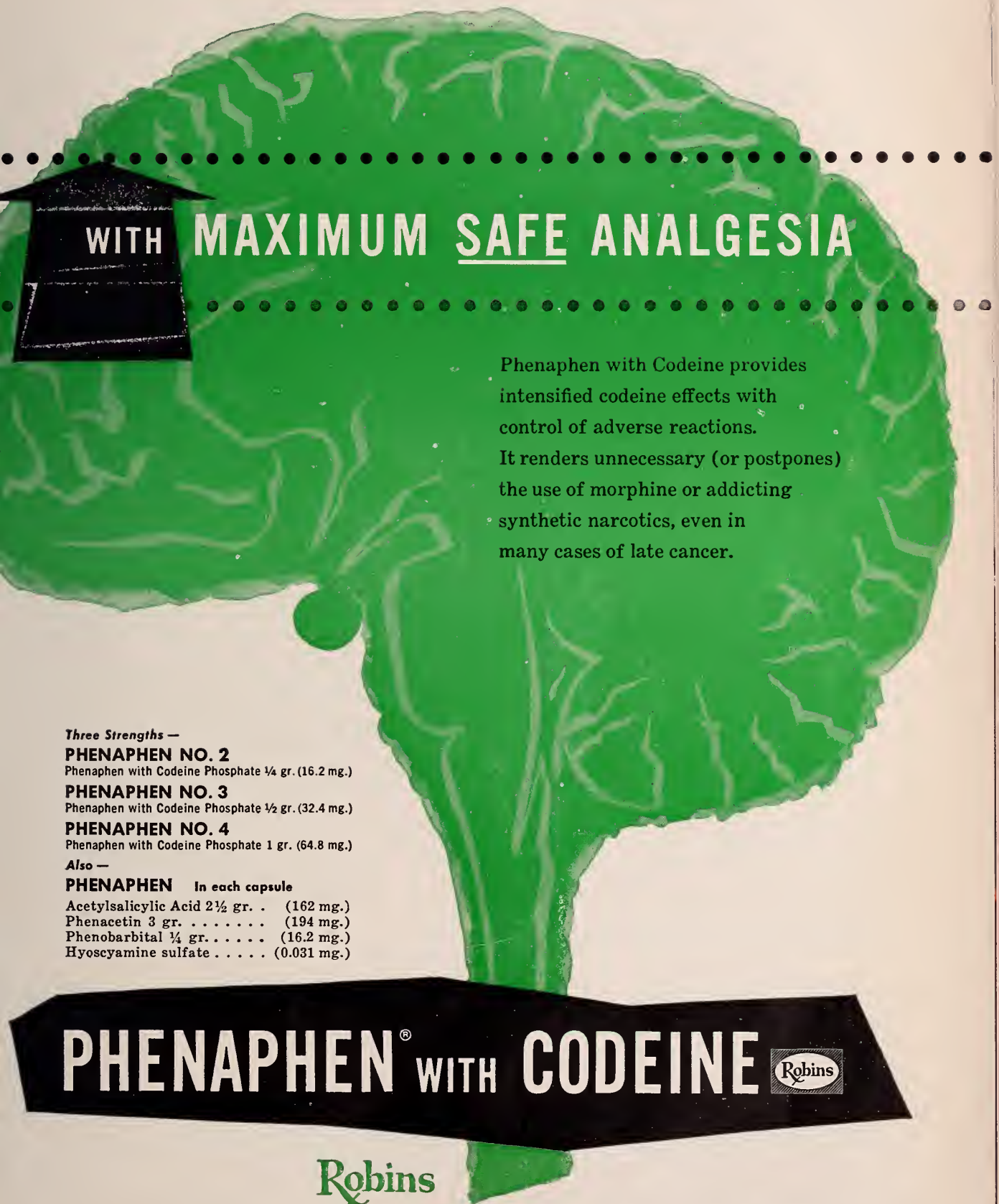
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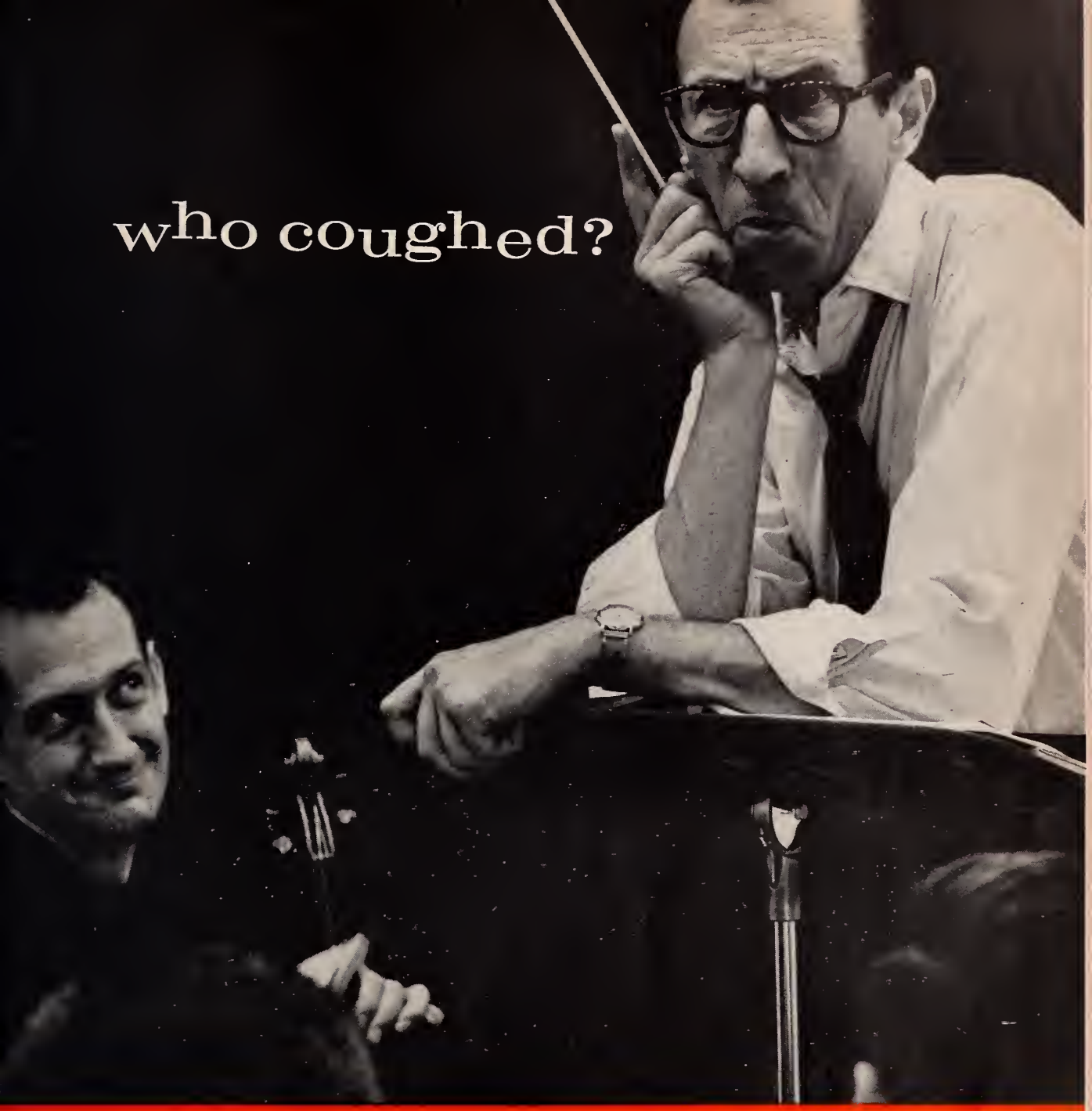
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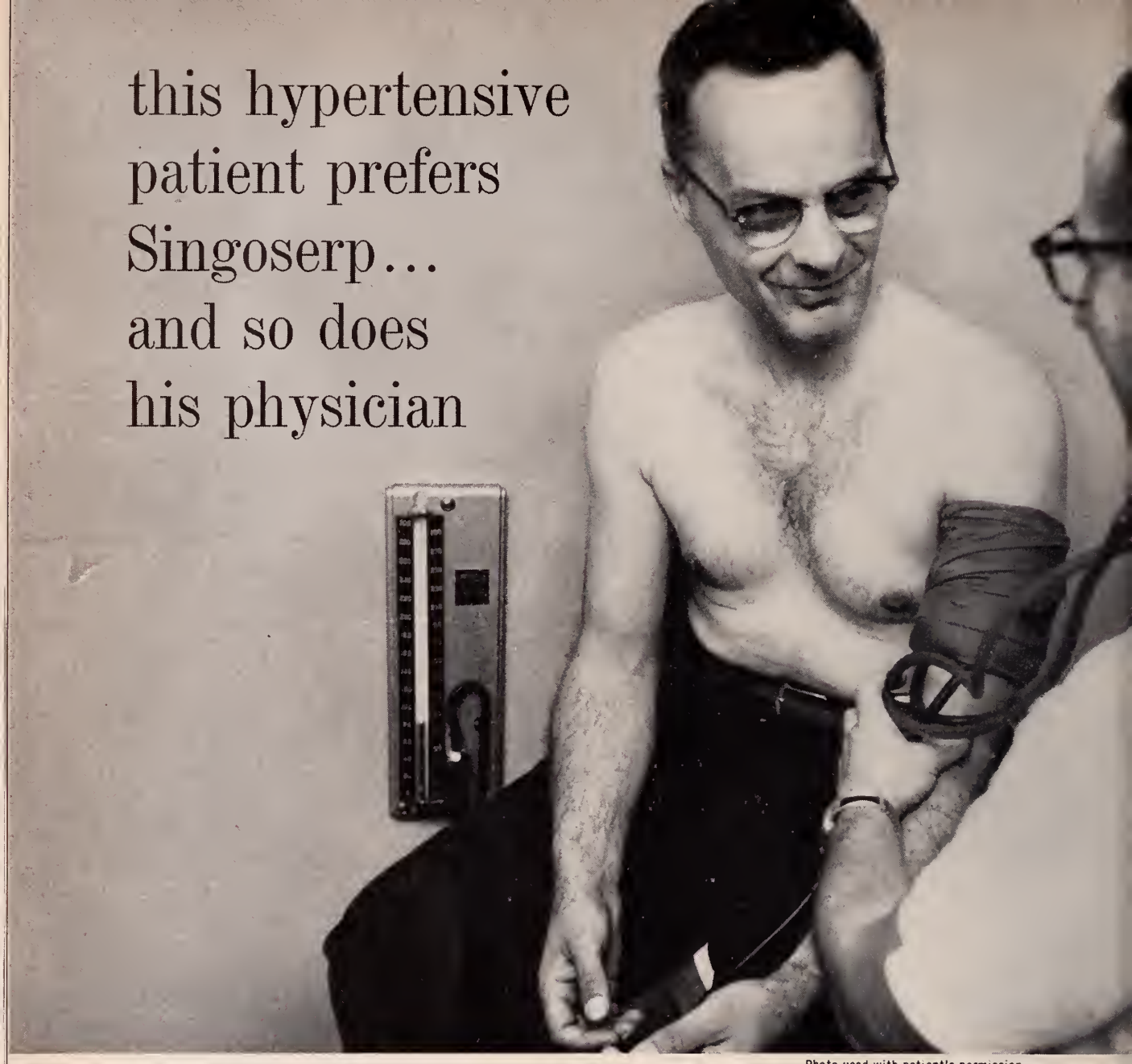


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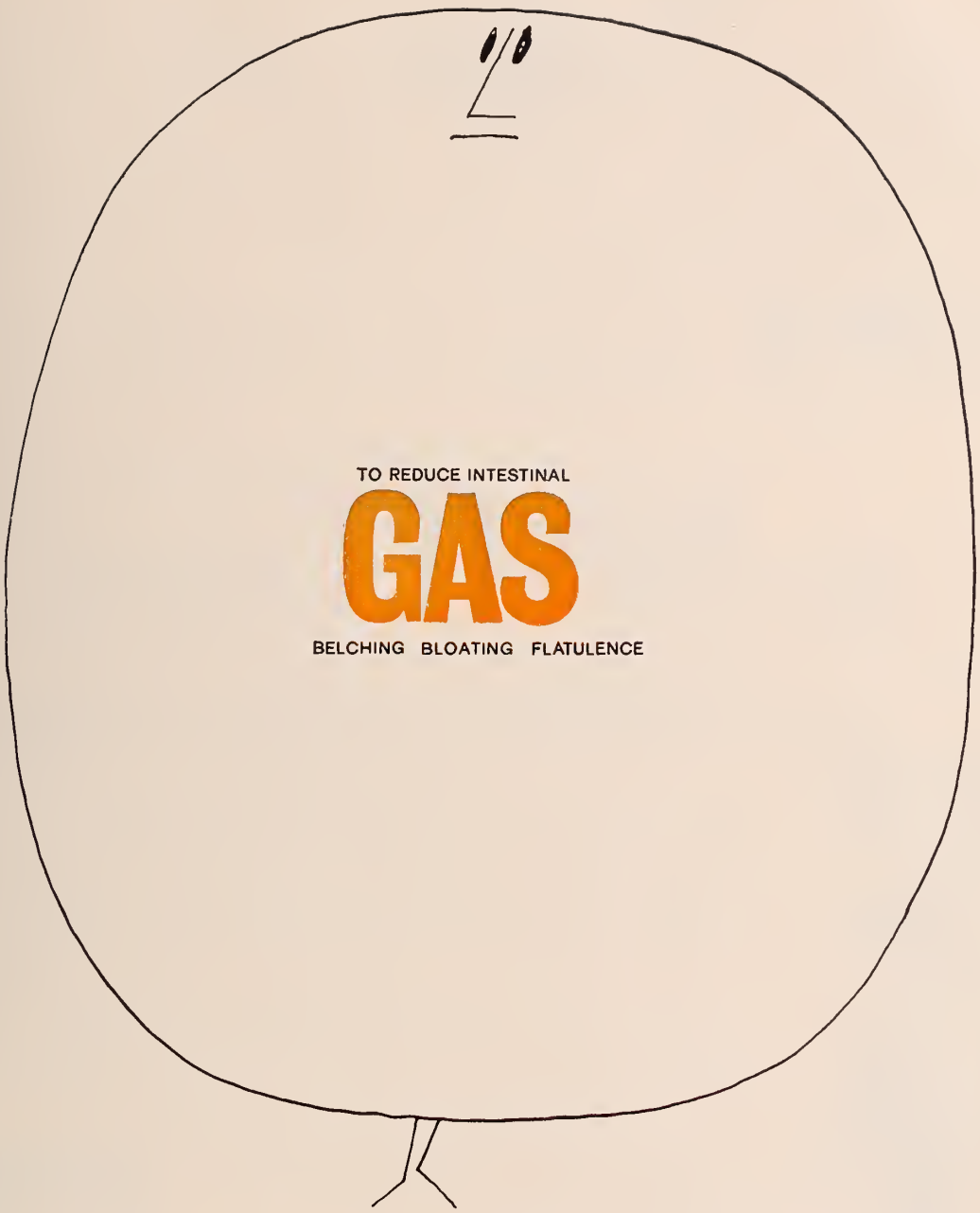
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1. Graham, B. S., *et al.* J.A.M.A. *166*:1586, 1958.

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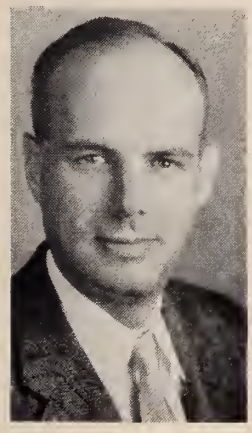
MEETINGS

Southwestern Medical Association To Meet in El Paso Oct. 20-22

The 42nd annual meeting of the Southwestern Medical Association will be held in El Paso Thursday, October 20, through Saturday, October 22, 1960.

Dr. Russell L. Deter, Southwestern Medical Association President, has announced an outstanding group of guest speakers who will participate in the meeting. They are:

Ernest Craige, M.D., Associate Professor of Medicine, The University of North Carolina, Chapel Hill, N. C.



Dr. Craige

Ernest E. Muirhead, M.D., Professor and Chairman of Department of Clinical Pathology, Wayne University, Detroit.



Dr. Muirhead

Donald Stubbs, M.D., Clinical Professor of Anesthesiology, Georgetown University, Washington, D. C.

Philip J. Hodes, M.D., Professor and Chairman of Department of Radiology, Jefferson Medical Center, Philadelphia.

Henry N. Harkins, M.D., Professor of Surgery, University of Washington, Seattle.

Harold W. Brown, M.D., Clinical Professor of Ophthalmology, New York University, Bellevue Medical Center, New York.

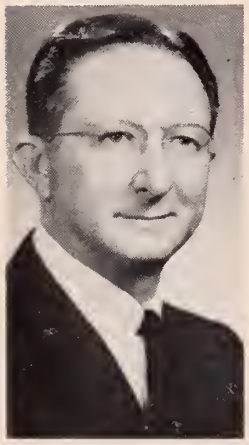
Headquarters for the meeting will be in the Hilton Hotel. A stimulating social calendar has been arranged for guests by members of the El Paso County Medical Society's Auxiliary.



Dr. Stubbs

Other officers of the association are Dr. Sherwood Burr, Tucson, president-elect; Dr. Brian S. Moynahan, Santa Fe, vice-president; and Dr. Merle D. Thomas, El Paso, secretary-treasurer.

Members of the Executive Committee are Dr. A. R. Clauser, Albuquerque, immediate Past President; Dr. Robert F. Boverie, El Paso; Dr. Louis G. Jekel, Phoenix; Dr. Emmit M. Jennings, Roswell; Dr. David Rusek, Chihuahua City, Mexico; Dr. Carlos Tapia, Hermosillo, Sonora, Mexico; and Dr. Louis W. Breck, El Paso, Managing Editor of SOUTHWESTERN MEDICINE.



Dr. Hodes

Guest speaker at the annual banquet at 8:00 p.m., October 21, in the Hilton Hotel will be Dr. Charles E. Irvin, Ormond Beach, Fla., who has gained fame as the "Merchant of Message." He will speak on "The Inside Story of an Outside Chance." Dr. Irvin received his education at Oberlin College, Ohio State University and Michigan State University, and holds A.B., A.M. and Ed. D. degrees. He has worked as both full-time and part-time educator from 1935 until 1957. He has served business and industry in a variety of capacities in the fields of labor, personnel, promotion, sales, training and public relations. This experience, coupled with additional service as an athletic coach, has given him a broad background from which he now speaks in a number of areas vital to business, industry, education, professional life and community service.

Author and Speaker

He is the author of "How to Sell Yourself, Your Ideas, Your Products." He now devotes full time to speaking and consulting in Sales Training, Management Training and Business and Industrial Communication. Dr. Irvin is being brought to the El Paso meeting through the courtesy of General Motors Corporation.



Dr. Brown

The banquet will be preceded by cocktails at 7 p.m., courtesy of Southwestern Surgical Supply Company.

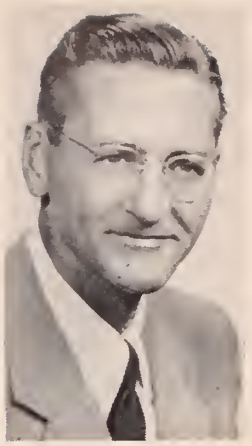
A feature at the banquet will be the presentation of a play by members of the El Paso County Medical Society Auxiliary. It is entitled "Doctors Wives as They Appear to Others . . . Doctors Wives as They Would Like to Be . . . Doctors Wives as They Really Are." On both afternoons of the 20th and 21st those attending the meeting will be able to make clinics and ward rounds with guest speakers at Thomason General Hospital under the direction of Dr. Frank H. Van Wagoner, Medical Director. There will be a specialty luncheon for each of the guest speakers Saturday noon.



Dr. Harkins

President of the association, Dr. Deter, is vice-president of the Texas Medical Association, vice chairman of the building committe for the new R. E. Thomason General Hospital and is co-chairman of the health subcommittee of the governor's conference on aging. He is immediate past chairman of the Texas Medical Association's committee on voluntary health insurance.

Members of the El Paso County Medical Society's committee planning the Southwestern meeting are Dr. R. F. Boverie, Dr. Charles L. Green, Dr. Louis W. Breck, Dr. Gilbert Landis, Mrs. Ira Budwig, Dr. Jack A. Walker, Dr. John B. Miller, Dr. Delphin von Briesen, Dr. Carlos A. Fernandez, Dr. E. S. Crossett and Dr. James L. McNeil.



Dr. Irvin

Program

Thursday, October 20

Morning Session

9:00-10:00 a.m. General Assembly

10:00-11:30 a.m. Lectures by Guest Speakers

"Medical Aspects of Cardiac Resuscitation"

Ernest Craige, M. D., Associate Professor of Medicine, The University of North Carolina, Chapel Hill

"The Role of Renal Medulla in Experimental Hypertension"

Ernest E. Muirhead, M.D., Professor and Chairman of Department of Clinical Pathology, Wayne University, Detroit

"Management of the Poor Risk Patient"

Donald Stubbs, M.D., Clinical Professor of Anesthesiology, Georgetown University, Washington, D. C.

"The Biliary Tract in Health and Diseases; Roentgen Manifestations"

Philip J. Hodes, M. D., Professor and Chairman of Department of Radiology, Jefferson Medical Center, Philadelphia

"The Surgical Treatment of Varicose Veins"

Henry N. Harkins, M. D., Professor of Surgery, University of Washington, Seattle

"Management of Strabismus in Children"

Harold W. Brown, M.D., Clinical Professor of Ophthalmology, New York University, Bellevue Medical Center, New York

12:00 noon Luncheon

Moderator, Russell L. Deter, M.D., El Paso, President, Southwestern Medical Association.

Question and Answer Session with entire panel of guest speakers.

Afternoon Session

Clinics and ward rounds with the guest speakers at Thomason General Hospital under direction of Dr. Frank H. Van Wagoner, Medical Director.

Evening will be free. If desired, arrangements can be made to visit La Fiesta or La Cucaracha in Juarez, Mexico.

Friday, October 21

Morning Session

9:30-11:30 a.m. Lectures by Guest Speakers

"Medical Evaluation of the Cardiac Patient for Surgery"
Ernest Craige, M.D.

"Drug Induced Hemolytic Anemia"
Ernest E. Muirhead, M.D.

"The Treatment of Pain"
Donald Stubbs, M.D.

"Ancillary Procedures in the Diagnosis of Broncho-Pulmonary Disease"
Philip J. Hodes. M.D.

"Surgery of the Biliary Tract"
Henry N. Harkins, M.D.

"Classification and Treatment of Ptosis," "Surgical Correction of Vertical Deviations,"
"Diagnosis and Treatment of the Structural Muscle Anomalies"
Harold W. Brown, M.D.

12:00 noon Specialty luncheon for each of the guest speakers.

Afternoon Session

Clinics and ward rounds with the guest speakers at R. E. Thomason General Hospital.

Evening

7:00 p.m. Cocktails, Hilton Hotel
Courtesy Southwestern Surgical Supply Company.

8:00 p.m. Banquet, Hilton Hotel
Speaker: Charles E. Irvin, A.B., A.M., Ed. D.
"The Inside Story of an Outside Chance"

Saturday, October 22

Morning Session

9:30-11:30 a.m. Clinical Pathological Conference
"The Poor Risk Patient"
Charles L. Green, M. D., El Paso, Moderator

"Present Knowledge on Methods of Prevention in Coronary Heart Disease"
Ernest Craige, M.D.

Ladies' Program

Thursday, October 20

9:00 a.m. Registration

3:00 p.m. Tea and Cocktails, International Club

Friday, October 21

Morning—Golf and Bridge Tournaments, El Paso Country Club

Noon—Luncheon and Style Show, Sunland Park Race Track

Saturday, October 22

10:00 a.m. Tour of Juarez homes and Coffee at Juarez County Club

Other Events

For doctors who are interested, a Golf Tournament will be held on Friday afternoon at El Paso Country Club.

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Dr. Marshall of Roswell

Elected President of NM AAGP

Dr. U. S. Marshall, Roswell, was elected president of the New Mexico Chapter of the American Academy of General Practice at the chapter's annual summer clinic at Ruidoso July 18-21.

Other new officers are Dr. Jack C. Redman, Albuquerque, president-elect; Dr. Fred Brown, Roswell, vice-president; and Dr. Randall W. Briggs, Roswell, secretary-treasurer. The retiring president was Dr. C. Pardue Bunch, Artesia.

Dr. W. J. Hopkins, Lovington, was elected a director of the NM AAGP to succeed Dr. Paul Feil, Deming.

Other directors are Dr. H. D. Lehman, Portales, and Dr. M. A. Tanny, Albuquerque.

Dr. Leland Evans, Las Cruces, was re-elected a delegate for a two year term. Dr. J. A. Rivas, Belen, will serve one more year as a delegate. New alternate delegate is Dr. A. M. Rosen, Taos. Dr. M. A. Tanny has a year to serve as alternate delegate. Dr. Evans is a member of the AAGP Commission on Education and is regional advisor for the AAGP in the Rocky Mountain states.

Dr. Jack C. Redman, Albuquerque, president-elect of the New Mexico Chapter, is a member of the AAGP National Commission on Legislation and Public Policy.

The Ruidoso Clinic was approved for 12 hours Category I training. It was supported by a grant from Merck, Sharp & Dohme's postgradute program. Seventy of the chapter's 101 members attended the clinic.



RUIDOSO MEETING—Speakers and officers at the annual meeting of the Ruidoso Summer Clinic in Ruidoso, N.M., July 18-21, 1960, are, left to right, Dr. Ernest Crow, Wichita, Kansas, speaker; Dr. Franklin C. Behrle, University of Kansas Medical Center, Kansas City, speaker; Dr. Kermit E. Krantz, University of Kansas Medical Center, speaker; Dr. Mahlon H. Delp, University of Kansas Medical Center, speaker; Dr. U. S. Marshall, Roswell, new president of the New Mexico Chapter of the American Academy of General Practice; Dr. C. Pardue Bunch, Artesia, retiring president of the N.M. AAGP; and Dr. Randall W. Briggs, Roswell, secretary-treasurer. The New Mexico Chapter annually sponsors the Ruidoso Summer Clinic. New officers not shown in the above photo include Dr. Jack C. Redman, Albuquerque, president-elect; and Dr. Fred Brown, Roswell, vice-president.

THE PRESIDENT'S PAGE

Aged: Problems and Solution*

By Russell L. Deter, M.D., *El Paso*†
President, Southwestern Medical Association

The problem of aging begins at birth. As aging progresses, there is a mental, physical, emotional, and sociological growth. In this process man ages to the so-called middle age of life. Then, if he is not careful, he is catapulted into the senior citizen class.

This comes too quickly for those who have been too busy to prepare themselves for these tapering-off years. They are not ready to accept the fact that there is a new generation which thoughtlessly will put them much too soon on to the shelf of the aged. These are indeed very painful and sensitive years to be pushed into suddenly by forced retirement. There is nothing like boredom or inactivity to promote senility.

Because too large a segment of our aged population is not prepared for this period of life, we must develop a plan to fit each individual into the sum total of the community. We must find a plan to utilize all individuals to the maximum of their potentiality. We must make them feel needed and wanted, and not commit them to the Siberia of sitting and sighing. To accomplish these goals, several important facts must be taken into consideration. Members of the aged population have varying degrees of good or bad health, financial solvency, and desire to keep trying.

Several Constants

There are several things that are fairly constant with people in their senior years. Their wants are few — certainly contained within their ability to pay; very seldom do we see older people buy beyond their means, or go into credit financing. They have years of training and experience in their respective fields. Many are experts in their particular lines. Most of them have solved the problems of sociologic adjustment to their environments. Most of them are philosophic about the seeming catastrophies that face many of the younger generations.

All of them are very proud and confident of their ability to care for themselves and their loved ones, if given a fair chance. Forced retirement is not giving them a fair chance. The financially independent are in just as much need of being wanted and needed as are the completely indigent, but usually are more able to fill their ambitions for themselves in later years. They, too, can be committed to sitting and sighing, if they and we are not careful.

Assuming that the way to live a fruitful life to its complete fullness is to live a busy, interesting, and exciting one to the limit of mental and physical capacity, regardless of age, we must approach the problem of aging as a two-fold one. The most pressing problem is that of the aged we now have with us, and how to work them into the total life of the community. The second one is to train our young men and women and our middle-aged so that they will face the problem with an intelligent attitude.

Categories of Aged

I recommend that we set up at a county level (including possibly a central state advisory committee) a board composed of men and women over 65 who have had administrative or executive abilities to consider the problem of the aged in the following categories.

1. The active, reasonably healthy persons who have been retired, and are willing and able to look out for themselves. The county board could gather data on the job seekers and their skills and could

* Reprinted from Texas State Journal of Medicine, Vol. 56, No. 6. June, 1960.
† Dr. Deter also is Vice-President of the Texas Medical Association, in which capacity he is coordinator of all committees and councils of the Texas Medical Association on problems of the aged. He also is co-chairman of the Subcommittee on Health of the Governors White House Conference.

seek requests from employers or local agencies who could utilize or train them. Any objection to the possible short term of service in a given job, due to their advanced years, can be answered thusly; as long as medicine continues to improve there is an unending source of supply of this short term man and woman power. Their years of training and experience should not be wasted.

Also, the board could furnish service organizations with experienced senior citizens to participate in community affairs or organization planning. Here, the board could draw upon those who are financially able, but inactive.

2. Those individuals who, by reason of health or finances, are partially disabled. The board could determine to what extent they could be incorporated into the sum total of the community life.

3. The next group to be considered would be those senior citizens with varying degrees of infirmity. An energetic rehabilitation program could be developed for them, again utilizing their physical and mental abilities to capacity. Persons in this group could help others find jobs or fit into the community.

Sound Program

4. This group includes the totally incapable. The board must take forceful leadership in establishing a sound program of convalescent, hospital, and nursing home care through legislation or city-county ordinance. It must set up strict rules for operation of these facilities and rigid training requirements for personnel working in them.

As to the pure health needs of the aged (by this I mean in care of diseases of the aged) we would like to make the following recommendation: that a subcommittee of the county board be appointed, consisting entirely of physicians, with whatever local help from welfare and social service they might need in carrying out their program. This group of physicians should very strongly consider preventive medicine education, accident prevention education, and they should develop in the community a very strong rehabilitation program for the aged. They should promote general health education, and emphasize the importance of periodic physical examinations to prevent illnesses, rather than to try and cure them.

Specific Health Needs

In connection with the specific health needs of the aged, the county committee could serve as a central agency where the needy could apply for help, and it could see that they get it in all phases of health. The physician committee should see to it that charity and part-pay clinics in hospitals be encouraged to include among their services facilities for periodic examination and health education services to older people to prevent illness. The medical society should offer and take leadership in establishing well-adult conferences for the aging. The county medical societies should take the leadership in the following areas:

1. Initiating, in cooperation with other civic groups, a program to help solve the overall problems of the aged.

2. Promoting improved health care of the aged in nursing homes.

3. Encouraging additional chronic care facilities in conjunction with hospitals.

4. Encouraging building additional custodial and nursing homes.

Doctors, as well as laymen, must be made aware of the overall problems of the aged, in addition to pathologic disease processes.

Financing Program

As to financing the program: Surely if maximum utilization of our senior citizens is developed, a very minimal portion of this group will need much financing. Certainly city, county, and state funds could be appropriated in minimal amounts, compared to the tremendous expenditure if everyone is included. An additional benefit of this overall program is that it would give us an absolute picture of the problem of the aged within six months to a year — a picture we have not been able to establish up to this point.

Finally, we should take some immediate steps to train young men and women and the middle-aged, so that they will face these problems much more resourcefully. They must have hobbies and extracurricular activities during their gainfully employed years, so that in their declining years these can be a source of income and mental and emotional gratification. Start now to make a place for yourself in the community for your later years.

FORENSIC MEDICINE

Problems in Toxicology

By Frederick P. Bornstein, M.D., *El Paso*

The increasing number of drugs and industrial poisons available on the market make the life of the forensic pathologist sometimes a rather unhappy one. The public is usually not aware of the ubiquitous presence of dangerous poisons that are sold over the counter (not only insecticides, organic and inorganic, such as fluorides, but even cyanides in silver polishes), and which are easily available to the person desiring a rapid exit from this world.

In the second group are the poisons that are accidentally introduced into the body or at least not with the intention of doing damage, such as alcohol and carbon monoxide. Homicidal poisoning is extremely rare and has been the least of our problems.

Basic Precautions

A number of basic precautions have to be taken at autopsy whenever a toxicological problem is suspected. In the course of years we have broadened these precautions considerably, having learned from sad experience that they are all necessary to establish a proper toxicological diagnosis. Originally we examined only blood. Later we added brain, liver and kidney and by now we also have added urine and even gastric contents. The last, so commonly thought to be the most important specimen, is actually of the least value in toxicological examination, except if solid particles or capsules containing the toxic agent are found. Fortunately, with the advance of chemistry, a large advance in toxicological methodology has taken place, for example ultraviolet spetophotometric analyses. These physical-chemical methods have their strengths and weaknesses, as they are not dealing with direct chemical identification but with absorption phenomena. Specifically, with some of the more complicated barbiturates so-called self-extinction phenomena occur, and a negative blood examination will be followed by positive findings upon chemical analysis of the brain.

Poison Identification

Frequently, specially in suicidal victims, samples of the capsules and tablets which the victim took are found, and with the help of the poison identification center in El Paso, at least a basic hint is given to lead us in the right direction. With all these means available there still remains an unresolved residue. There also remain cases of a questionable nature where organic findings and toxicological findings are found simultaneously and make an evaluation difficult. If such a problem arises, I feel that one should give the victim the benefit of the doubt (considering the social opprobrium on suicide) and give more weight to the organic than to the chemical evidence.

In summary, toxicological problems are manifold and some later columns will be devoted to discussion of some of the more important individual poisons. Immediate collection of material is imperative and so is, by the way, the avoidance of embalming.

Coming Meetings

University of Texas Postgraduate Course, Turner Home, El Paso, Sept. 18, 1960.

Southwestern Medical Association, 42nd Annual Meeting, Hotel Hilton, El Paso, Oct. 20-22, 1960.

American Fracture Association, Annual Meeting, Mexico City, Oct. 30-Nov. 4, 1960.

Southwest Obstetrical and Gynecological Society, Annual Meeting, Riviera Hotel, Las Vegas, Nev., Nov. 7-8, 1960.

Medical Society of the United States and Mexico, Annual Meeting, Guadalajara, Nov. 8-10, and Mazatlan, Nov. 11-12, 1960.

Texas Orthopaedic Association, Galveston, Texas, April 24, 1961.

Treatment of Snake Bite

By W. E. Lockhart, M.D., *Alpine, Texas*

In Conn's 1960 Current Therapy Dr. Ahuja of India states "the only sound and reliable form of treatment for snake venom poisoning is specific serum therapy." No mention is made of the refrigeration treatment advocated by Dr. Herbert L. Stahnke of Tempe, Arizona. Therefore, one must conclude that this most important advance in treatment of snake bite is not well understood and appreciated even in India. The refrigeration treatment is based on the fact that proteolytic enzymes in the venom are inhibited by temperatures approaching Zero Degrees Centigrade (32 F.), permitting detoxification in the tissues without destruction. The method in no way interferes with previous, conventional methods of treatment.

Immediately after the bite a tourniquet, perhaps a shoestring, should be applied one or two inches proximal to the bite and tied tightly enough to obstruct venous and lymphatic return but not tight enough to obstruct the arterial pulse. The tourniquet should **not** be loosened at intervals but should be left in place until the extremity is thoroughly refrigerated and then it should be removed and not replaced. An intelligent, practical layman may make single, linear (not cruciate or spiral) incisions in a longitudinal direction avoiding visable blood vessels and of a depth only through the skin—allowing for the curve of the fangs—the incisions passing through each fang wound. A sharp, clean razor blade is a suitable instrument. Suction by what ever method available should be applied. If cracked ice is available, the entire extremity should be packed with ice as the patient is carried to the hospital.

Incision Extended

The surgeon, cleaning the wound with antiseptics such as Phiso-Hex, under good light and with steril instruments should extend the incision down to the deep fascia. If the deep fascia was penetrated by the fangs, the fascia should be opened, and suction should be repeated. The patient should not be given Demerol or any morphine derivative, since these augment the lethal action of the venom. A quick acting barbiturate, such as Seconal, may be given for restlessness. The refrigeration effectively reduces the pain.

Systemic reaction may be due to intravascular envenomization, which may be rapidly fatal because of hemolysis or neurotoxic action. Adrenalin and Levophed may be indicated for shock. Antihistamines and cortisone have not proved to be of value. Oxygen and blood transfusion may be indicated.

Antivenin

Antivenin should not be given locally, since this increases the swelling and may hasten the spread of the venom. Local anesthetics, saline solution or local heat are contraindicated. Specific anti-serum may be given systemically after it has been established that the patient is not allergic to horse serum. In most instances the serum is probably without value. More research is needed to establish the value of all of the anti-serums in modern medicine, and it will probably reveal that these are of limited value in proportion to risks involved. However, legal aspects of the matter often compels the surgeon to administer such agents pending the much needed research and established evaluation. The antivenin now available to the United States, marketed by Wyeth, Inc., does not contain sufficient antigen for the Southwestern Diamond-Back Rattlesnake. There appears to be much species variation in the venom.

Entire Extremity

It is important that the entire extremity be immersed in an ice pack. Ice-bags will not suffice. The extremity should be maintained in continuous refrigeration for at least 96 hours, four days and nights, and any interruption in the refrigeration will increase the pain and court disaster from tissue destruction. It is important that no salt be added to the ice, for to do so would lower the

temperature below zero centigrade and would freeze the extremity. Ice melting in fresh water will lower only to near freezing, and the limited circulation remaining in the extremity will keep the temperature above freezing. No damage will result to the extremity because of the refrigeration. No refrigerant other than melting ice is recommended. Other portions of the patient's body should be protected from the ice, and the patient should be kept warm by whatever means is necessary.

Doubtless many methods of applying the ice-pack would be successful. The skin must be protected from the water otherwise maceration would occur during the four-day period, and air must not get to the extremity for this would nullify the refrigeration. A method readily available, practical and effective is to use a piece of thin plastic tubing obtainable at any dry-cleaning establishment. The tube should be about five times the length of the extremity and is doubled inside itself for added strength, and the doubled end is closed with a rubber band. Then the tubing is applied to the extremity exactly as stockinette is applied, beginning at the hand or foot. Upon reaching the shoulder or groin, soft cracked ice three or four inches in thickness is packed on all sides of the extremity as the plastic folds back toward the hand or foot, where the outside layer is closed also with the rubber band. Removing the rubber band makes it possible to inspect the hand or foot or to add more ice or to drain off excessive water. Diagram:



Tetanus Toxoid Booster

A tetanus toxoid booster should be given, and penicillin-streptomycin may be best prophylaxis against infection and secondary tissue destruction. If sepsis becomes evident despite these antibiotics, chloromycetin may be the antibiotic of choice. Varidase should not be used as it speeds absorption.

The refrigeration method or "LC" method, as Dr. Stahnke call it, relieves pain, prevents swelling, inhibits the proteolytic enzymes in the venom, delays the dispersion and absorption of the venom, diminishes tissue destruction, helps prevent hemolysis or neurotoxic action, inhibits bacterial infection preventing secondary tissue destruction and helps antibiotics overcome such infection. The method does not interfere with conventional treatment of snake bite, and the end result is more satisfactory than by any other method of treatment.

401 North Fourth Street

American Fracture Association To Meet This Fall in Mexico City

The 21st annual convention of the American Fracture Association will be held in Mexico City October 30 through November 4, 1960. The chairman of the convention committee, Dr. Guillermo de Velasco Polo of Mexico City, has announced that the meeting will feature a side trip to Merida, Yucatan, with visits to the Mayan Ruins at Chichen-Itza and Uxmal.

The following physicians will participate in the convention's scientific program: Dr. Jose Alvarez Amezquita, Secretary of Health of Mexico, Mexico City; Dr. Juan Farill, Mexico City, Dr. Henry W. Meyerding, Honorary Life President, Rochester, Minn.; Dr. W. Compere Basom, First Vice-President of AFA, El Paso; Dr. Harvey Billig, Los Angeles;

Dr. A. H. Diehr, St. Louis, Mo.; Dr. H. W. Wellmerling, Secretary General, Bloomington, Ill.; Dr. John B. Erich, Mayo Clinic, Rochester, Minn.; Dr. Guillermo de Velasco y Polo, Mexico City; Dr. Irvin H. Scott, Sullivan, Ind.; Dr. F. G. Pipkin, Kansas City, Mo.; Dr. Robert Elliott, Houston;

Dr. William Johnson, Galesburg, Ill.; Dr. A. F. Barnett, West Frankfort, Ill.; Dr. Earl McBride, Oklahoma City, Okla.; Dr. Leslie Rush, Meridian, Miss.; Dr. Roger Anderson, Seattle, Wash.; Dr. Phillip Fox, Washington, Ind.; and Brig. General Alfonso Montagne, M.D., Lima, Peru.



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*REFERENCES: Maxwell, M. H., et al.: Peritoneal Dialysis: 1. Technique and Applications, J.A.M.A. 170:917 (June 20) 1959.

Doolan, P. D., et al.: An Evaluation of Intermittent Peritoneal Lavage, Am. J. Med., 26:831 (June) 1959.

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Ruptured Uterus*

By Bernard J. Hanley, M.D., and Lester T. Hibbard, M.D., *Los Angeles*

Rupture of the pregnant uterus can be counted among the most devastating complications of pregnancy.[3] Not only is there a very large fetal mortality associated with this accident, but, also the probability of hysterectomy and the possibility of maternal death. True, modern obstetrical practice has reduced the risk surrounding uterine rupture. But even so, in the best of hospitals and with expert supervision, uterine rupture does occur—and with the results that range from the unpleasant to the disastrous.

Anyone doing a normal amount of obstetrical practice needs to be informed on this subject. It is not too trite to say that forewarned is forearmed—and rupture is not so rare that we will not see cases. In over a half million reported cases, the incidence of rupture was one in 1,800 deliveries.[8] Our incidence is similar—being one in 2,000 deliveries.

Before embarking on a discussion of the subject, it might be well to consider a classification of uterine rupture. Probably the best is that of Eastman[6] who classifies rupture as being either (1) spontaneous (2) traumatic or (3) following cesarean section. In this third category, we could also include myomectomy scars. Another possible method of classification would be either incomplete or complete rupture. However, these terms are not particularly meaningful. For example, an incomplete rupture of the lower uterine segment which involved the uterine artery would be extremely serious or even lethal.[5] On the other hand, a complete rupture of a previous lower uterine segment scar might cause no problem and even permit vaginal delivery, as has been demonstrated by the palpation of defective scars following vaginal deliveries.

Material, Table I

The material for this paper was gathered from a survey of deliveries at the Los Angeles County General Hospital during the past ten years. It includes 42 cases of which 16 were spontaneous rupture, 10 due to obstetrical trauma, and 16 followed a previous cesarean section.

*From the University of Southern California School of Medicine and the Los Angeles County General Hospital

TABLE I

Classification of Ruptured Uterus

SPONTANEOUS	16 Cases
TRAUMATIC	10 Cases
PREVIOUS SCAR	16 Cases

Spontaneous Rupture

Tables II, III, & IV

It is important to remember that in almost all cases of spontaneous rupture of the uterus there is either an element of accompanying trauma, a history of past trauma, or a reasonable suspicion of trauma as evidenced by grand multiparity.[11] Our next tables (II, III, & IV) illustrate this point. Note that when past or present trauma is lacking, the patient is often the grand multipara. Other cases had evidence of past obstetrical trauma—notably following abortion. In this group three types of abortion trauma are presented, perforation at the time of attempted induction, severe infection, and damage to the soft uterine wall by a curettage done to complete an incomplete abortion. The remaining cases demonstrate an element of present trauma, either obstructed or tumultus labor. Note also that this series con-

TABLE II

Spontaneous Rupture

Number	Age	Parity	Abortions	Weeks Gestation	Baby	Contributing Trauma	Treatment
1	43	8	0	40	Neonatal death	..	Total hysterectomy
2	30	7	1	24	Stillborn	..	Total hysterectomy
3	32	7	0	36	Stillborn	..	Subtotal hysterectomy
4	27	7	0	40	Stillborn	..	Low subtotal hysterectomy
*5	42	4	1	40	Stillborn	..	Subtotal hysterectomy repair of bladder
*6	..	2	1	..	Stillborn twins	..	Total hysterectomy

*Maternal deaths.

TABLE III

Spontaneous Rupture *(Continued)*

Number	Age	Parity	Abortions	Weeks Gestation	Baby	Contributing Trauma	Treatment
7	33	5	1	40	Stillborn	Obstructed labor (brow)	Subtotal hysterectomy
8	29	5	0	40	Stillborn	Dystocia plus pitocin	Subtotal hysterectomy
9	28	4	0	36	Stillborn	Compound presentation	Total hysterectomy
10	23	4	2	40	Stillborn	Septic abortion	Subtotal hysterectomy Salpingo-oophorectomy
11	..	4	1	29	Stillborn	Perforation at time of criminal abortion	Subtotal hysterectomy

TABLE IV

Spontaneous Rupture *(Continued)*

Number	Age	Parity	Abortions	Weeks Gestation	Baby	Contributing Trauma	Treatment
12	39	3	1	43	Stillborn	Tumultuous labor with uncontrolled bearing down efforts	Subtotal hysterectomy
13	25	3	0	40	Stillborn	Compound presentation	Subtotal hysterectomy
14*	27	3	Ectopic	32–33	Undelivered	Probable old obstetric laceration	No surgery
15	29	2	1	35	Stillborn	Damage by curette	Subtotal hysterectomy Left salpingo-oophorectomy
16	24	1	1	40	Normal	Prolapsed arm	Subtotal hysterectomy

*Maternal death.

tains only one case in which pitocin was administered. Undoubtedly, the reason there were not more such cases is due to the fact that on this service the administration of pitocin, either in small divided intramuscular doses or more recently by intravenous drip, was carefully and continuously supervised.[8,13]

In almost all cases the rupture involved lower uterine segment. Usually the rupture extended laterally, often involving one or the other uterine artery. In one case the bladder was involved. As might be expected, this type of rupture was the most dangerous to the mother being responsible for all three maternal deaths in this series.[10] There are probably two reasons for this. First, such a rupture is unexpected, and, second, if the uterine artery is involved, hemorrhage is apt to be both rapid and profuse.

Traumatic Rupture, Tables V & VI

Included in this group are those cases where there is a definite direct trauma produced by an obstetrical manipulation. As was true for spon-

TABLE V

Traumatic Rupture

Number	Age	Parity	Weeks Gestation	Baby	Type Trauma	Treatment
1	30	8	33	Stillborn	Forceful delivery of premature breech trough incompletely dilater cervix	Closure of laceration
2	31	4	32	Stillborn	Same	Subtotal hysterectomy
3	28	3	36	Normal	Forceful delivery of transverse lie through a transverse incision lower uterine segment	Total hysterectomy
4	35	1	40	Normal	Same	Subtotal hysterectomy
5	32	1	40	Normal	Classical Keilland midforceps–cephalopelvic disproportion	Subtotal hysterectomy

TABLE VI

Traumatic Rupture *(Continued)*

Number	Age	Parity	Gestation	Baby	Type Trauma	Treatment
6	28	1	40	Normal	Difficult breech extraction of 9 lb 6 oz infant	Repair of laceration
7	24	1	40	Stillborn	Failed forceps funnel pelvis	Subtotal hysterectomy
8	33	5	36	Stillborn	Internal podalic version (transverse lie)	Subtotal hysterectomy
9	32	4	40	Abnormal (traumatized)	Mid forceps through incompletely dilated cervix	Subtotal hysterectomy
10	23	3	40	Stillborn	Dystocia (face presentation)	Total hysterectomy Left salpingo-oophorectomy

taneous rupture, usually the lower uterine segment is involved. In retrospect, these obstetrical manipulations, for the most part, seemed either hazardous or ill advised. For example, it is recognized that a forceful breech extraction of a premature infant through a partially dilated cervix can produce a severe laceration. Two cases support this point of view. It has also been pointed out that it is difficult to deliver an infant through a transverse lower uterine incision when a section is done for the indication of transverse lie, because a contraction ring is often present. In two cases, attempted delivery through such an inadequate incision result in damage sufficient to necessitate removal of the uterus. Further, difficult mid-forceps, internal version, and similar obstetrical maneuvers can be expected to produce major uterine injuries. Fortunately, the increasing safety of cesarean section is making these procedures obsolete.[7] [14] Happily, obstetrical trauma sufficient to cause rupture of the uterus did not result in any maternal deaths and this is undoubtedly due to the fact that the damage was easily and quickly recognized so that adequate treatment was not delayed.

Rupture of Previous Section Scar
Tables VII, VIII & IX

Six of the 16 cases followed a previous low cervical section. Four cases were found at the time of elective section or section done in early labor. These deficient scars had caused no problem. It is likely that there were other cases not included because the operator did not consider it of sufficient importance to record the fact that a silent rupture had occurred. The fifth case might have been a problem except for the fact that the omentum was adherent over the lower uterine segment and probably limited the bleeding. The sixth case illustrates what can happen if a patient with a defective scar is left for a long period of time in labor. This patient was found to have a defective scar at the time of a second section. The scar was trimmed, repaired, and reinforced, and a repeat elective section planned in the event of subsequent pregnancy. However, because the third section was not performed either electively or in early labor, the baby was extruded through the scar into the abdominal cavity.[9]

TABLE VII

Previous Section Scar

Number	Age	Parity	Gestation	Baby	Type of Section	Treatment
1	17	1	40	Normal	Low cervical (1)	Repair of scar
2	27	2	40	Normal	Low cervical (2)	Repair and tubal ligation
3	22	2	40	Normal	Low cervical (2)	Subtotal hysterectomy
4	21	3	40	Normal	Low cervical (3)	Subtotal hysterectomy
5	33	2	40	Normal	Low cervical (1)	Total hysterectomy
6	35	2	40	Stillborn	Low cervical (2) Repair of occult rupture at time of second section	Total hysterectomy

TABLE VIII

Previous Section Scar *(Continued)*

Number	Age	Parity	Weeks Gestation	Baby	Type of Section	Treatment
7	35	6	36	Stillborn	Classical(1)	Total hysterectomy
8	27	2	35	Stillborn	Classical(2)	Total hysterectomy
9	18	1	40	Normal	Classical(1)	Repair of scar
10	..	2	40	Stillborn	Classical(2)	Subtotal hysterectomy
11	24	2	32	Neonatal death	Classical(2)	Subtotal hysterectomy

TABLE IX

Previous Section Scar *(Continued)*

Number	Age	Parity	Weeks Gestation	Baby	Type of Section	Treatment
12	34	7	30	Neonatal death	Classical(1)	Subtotal hysterectomy
13	38	3	36	Stillborn	Classical(2)	Subtotal hysterectomy
14	29	3	40	Stillborn	Low classical (1)	Subtotal hysterectomy
15	..	4	37	Neonatal death	Classical(2)	Subtotal hysterectomy
16	..	1	36	Stillborn	Classical(1)	Subtotal hysterectomy

There were 10 cases of rupture of a classical section scar. Since few classical sections are being done, this represents a high proportion as compared to the low segment operation. Rupture of a classical scar is apt to occur before term, before the onset of labor, and is accompanied by considerable hemorrhage. Because of this, it is not likely that the infant will survive.[4]

Diagnosis

The following signs and symptoms of uterine rupture were variously observed:

(1) Local tenderness, particularly over a previous section scar.

(2) Vaginal bleeding, including old and fresh blood in small and large amounts.

(3) Concealed hemorrhage as evidenced by shock, abdominal distention, and shoulder tip pain.

(4) Cessation of fetal heart tones or irregular fetal heart tones.

(5) Cessation of labor accompanied by retrogression of the presenting part from the pelvis.

(6) Palpable irregular abdominal masses.

(7) Palpable laceration in the lower uterine segment.

One would suppose that with a diagnosis of a previous section, particularly a classical section, that the attendant would be alert to the possibility of rupture. However, this is not always the case. For example, a patient having a history of two previous classical sections exhibited periumbilical pain followed by generalized mild abdominal tenderness, followed by severe periumbilical pain and a painful tender scar, followed by shoulder tip pain. Even then the proper diagnosis was not entertained.

A diagnosis of traumatic rupture may or may not be made, even if the proper vaginal and uterine exploration is done following deliveries. Although one would think that a laceration would be easily palpated, this is not always true, particularly if it involves the lower uterine segment. One must always keep this fact in mind if a patient continues to hemorrhage or show evidence of shock in the post-partum period. Spontaneous rupture of the uterus is even less often diagnosed. Usually the baby will be delivered vaginally and, unless there is an immediate profuse vaginal hemorrhage, the attendant may not realize the necessity of a careful vaginal and uterine exploration. It is certainly true that rupture of the uterus may not be diagnosed until late in the post-partum period or even until the time of laparotomy.

Treatment Prophylaxis

The potential hazards of vaginal delivery following cesarean section are universally recognized. Possibly less appreciated is the patient whose uterus has been damaged by other types of obstetrical trauma. Certainly, a previously sustained deep laceration of the cervix can be extended by a subsequent delivery. We have seen examples where such lacerations have extended to involve uterine vessels with disastrous results. We give due consideration to previous section scars. All uterine scars deserve a careful evaluation to determine if another vaginal delivery will be safe.

Treatment

Definitive treatment must be individualized. Usually it will involve a hysterectomy.[1] It is of interest to note that in the days before total section hysterectomy became fashionable, these patients were adequately treated by a subtotal hysterectomy plus repair of any laceration of the lower uterine segment. On occasion, it is possible to repair the laceration, particularly if it is important to preserve the childbearing function.[12] Possibly repair was not done more often because the operator was thinking of the potential future risk.

When undertaking surgery, it is vital that adequate blood replacement be available. It is not uncommon that two or three thousand ccs. of blood is needed and in some cases this figure will be even higher. As a general rule, an inhalation anesthetic is preferred. Cyclopropane anesthetic seems ideal for this situation. While we were prepared, if necessary, to ligate the hypogastric artery, in no case was this done.

Maternal Mortality

A recently reported series totaling 377 cases gives an average maternal mortality of 44 per cent, with a range from a low of four to a high of 58 per cent.[11] In this series, there were three deaths among 42 patients or an incidence of seven per cent. As has been mentioned, all three deaths were in the spontaneous classification. It is notable that these three patients were treated

vigorously, even heroically. Death occurred, not because of neglect or because of failure to anticipate what should be obvious, or because of inadequate facilities for treatment. It was simply a case of rapid blood loss producing irreversible shock. One patient received 8500 ccs. of blood, some by the arterial route.[2] The second patient received 4500 ccs. of blood. The third patient died before a blood transfusion could be started. It would have been most fortuitous if any one of these three patients had survived. One can only say that the maternal hazards of ruptured uterus have been materially reduced but not eliminated.

Fetal Mortality

Table X

A collected series of 326 cases gives an average fetal mortality of 73 per cent ranging between a low of 33 per cent and a high of 88 per cent.[11] In our series, the fetal mortality was 72 per cent. As the slide demonstrates, mortality is extremely high with spontaneous rupture. It is also high with rupture of a previous classical section scar. It is obvious that fetal mortality will always be high unless one includes a large proportion of cases where there has been only the separation of a lower uterine segment scar.

TABLE X

Perinatal Mortality

Type of rupture	Stillbirths	Neonatal Deaths	Total
Spontaneous	14 of 16*	1 of 16	15 of 16
Traumatic	5 of 10	0 of 10	5 of 10
Previous Scar	7 of 16	3 of 16	10 of 16
Per cent	62%	10%	72%

*Stillborn twins counted as one.

Conclusion

In summary, the following points are emphasized:

(1) Rupture of the pregnant uterus is a very real obstetrical hazard, sufficiently common that we need to be alert to the possibilities.

(2) It is unlikely that rupture will occur unless the uterus has been damaged either by previous obstetrical trauma, a scar, or direct trauma of an obstetrical manipulation.

(3) The clinical picture of uterine rupture is not always promptly recognized, either because of a lack of appreciation on the part of the attendant or because of a paucity of early symptoms.

(4) Because of the seriousness of this complication, all obstetrical patients who might be vulnerable to uterine rupture should be carefully evaluated. Particularly, the patient's obstetrical history should not be neglected.

(5) We must treat uterine rupture with respect. Not only is there a better than even chance that the baby will be lost, but also the mother is in danger and this is true despite the best of facilities and the highest of obstetrical skill.

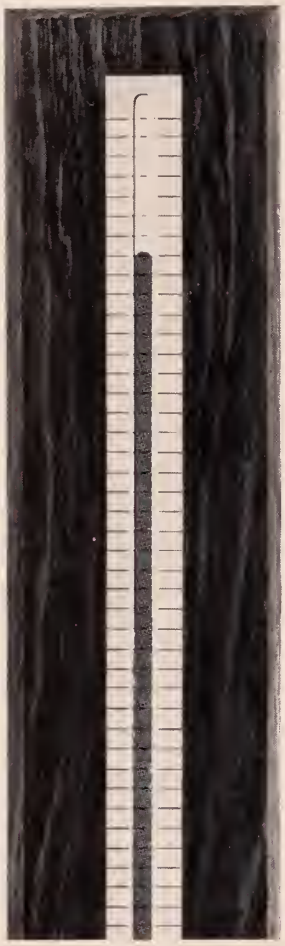
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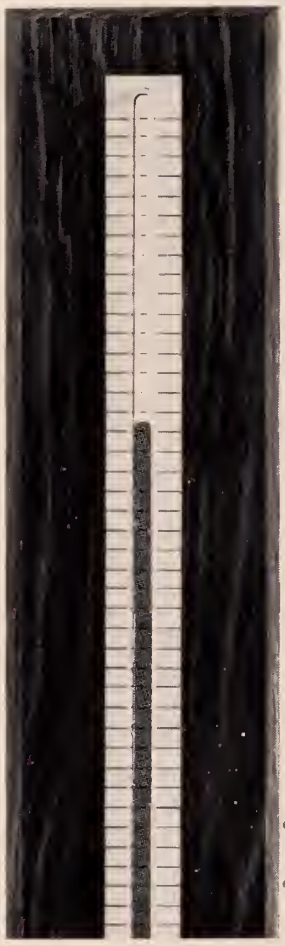
1. Bancroft, Livingstone, G., and Olyles, T. J.: Irish J. M. Sc. 386: 81, 1958.
2. Collins, C. G., Jones, F. B., Weese, W. H., Thorn, J. C., Braden, F. R.: Am. J. Obst. & Gynec. 74: 465, Sept. 1957.
3. Davis, C. H. and Carter, B.: Gynec. & Obs., Hagerstown, Maryland, W. F. Prior 1: Chap. 19, p. 1, 1953.
4. Dewhurst, C. J.: J. Obst. & Gynec. Brit. Emp. 64: 113, Feb. 1957.
5. Donald, Ian: Practical Obst. Problems, London, Lloyd-Fuke 2nd edition: 507, 1959.
6. Eastman, N. J.: Williams Obst., N. Y., Appleton Ed. 11: 942, 1956.
7. Ferguson, R. K. and Reid, J. E.: Am. J. Obst. 76: 172, July 1958.
8. Golden, M. L. and Betson, J. R., Jr.: Obst. & Gynec. 13: 506, 1959.
9. Kramm, A. and Colliton, W. F., Jr.: South. M. J. 51: 1572, Dec. 1958.
10. Pedowitz, P. and Perell, A.: Am. J. Obst. 76: 161, July, 1958.
11. Posner, L. B., Santos, J. R. and Posner, A. C.: Obst. & Gynec. 13: 288, Mar 1959.
12. Speert and Guttmacher: Obst. Prac., N. Y., Landsberger: 382, 1956.
13. Taylor, J. J.: Penn. M. J. 60, 869, July 1957.
14. Ware, H. H., Jr., Jarrett, A. Q., and Reda, F. A.: Am. J. Obst. 76: 181, July 1958.

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References: 1. Reports to the Squibb Institute, 1960. 2. David, N. A.; Porter, G. A., and Gray, R. H.: Monographs on Therapy 5:60 (Feb.) 1960. 3. Stenberg, E. S., Jr.; Benedetti, A., and Forsham, P. H.: Op. cit. 5:46 (Feb.) 1960. 4. Fuchs, M.; Moyer, J. H., and Newman, B. E.: Op. cit. 5:55 (Feb.) 1960. 5. Marriott, H. J. L., and Schamroth, L.: Op. cit. 5:14 (Feb.) 1960. 6. Ira, G. H., Jr.; Shaw, D. M., and Bogdonoff, M. D.: North Carolina M. J. 21:19 (Jan.) 1960. 7. Cohen, B. M.: M. Times, to be published. 8. Breneman, G. M. and Keyes, J. W.: Henry Ford Hosp. M. Bull. 7:281 (Dec.) 1959. 9. Forsham, P. H.: Squibb Clin. Res. Notes 2:5 (Dec.) 1959. 10. Larson, E.: Op. cit. 2:10 (Dec.) 1959. 11. Kirkendall, W. M.: Op. cit. 2:11 (Dec.) 1959. 12. Yu, P. N.: Op. cit. 2:12 (Dec.) 1959. 13. Weiss, S.; Weiss, J., and Weiss, B.: Op. cit. 2:13 (Dec.) 1959. 14. Moser, M.: Op. cit. 2:13 (Dec.) 1959. 15. Kahn, A., and Grenblatt, I. J.: Op. cit. 2:15 (Dec.) 1959. 16. Grollman, A.: Monographs on Therapy 5:1 (Feb.) 1960.

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The Crisis of the Conservatives

By Allan L. Haynes, M.D., *Clovis, N. M.*
President, New Mexico Medical Society

The spirits of conservatives may have been slightly elevated by the second of the recent political conventions — but most conservatives, and especially physicians, probably feel like homeless wanderers in this summer of 1960.

The easy and tempting conclusions is that the continuing political shift to the "left" is a result of a singularly unimaginative contest in which the two major parties cry to outbid each other in elaborate benefits. On further reflection, the unpleasant fact emerges that the conservatives have not found an articulate voice in the political thinking of the nation. Senator Goldwater expressed it more aptly when he wrote, "Our failures . . ., is the failure of the conservative demonstration." Be the lack of an effective and audible conservative demonstration, conservative office-holders have been either discouraged, defeated, or gradually displaced leftward by the failure of conservatives to balance the outcry of the "liberals."

It is both unfair and unrealistic to throw all the blame on defaulting candidates and office-holders. The simplest fact of political life is that the first and last duty of a candidate is to be elected and stay in office; even men of conservative ilk, in office, must respond to the pressures that are palpably evident in the public thinking.

The pertinence of this to our affairs becomes apparent when one realizes that we cannot expect an isolated atmosphere of conservatism to enclose the affairs of the medical profession while the political climate of the nation has, by default, become more and more liberal (or radical).

If, then, a conservative demonstration is to be made, physicians must join with all other men of similar mind, for we have long known that we have as much at stake in liberty as any group of men. How is this demonstration to be made? The best source of advice is the politicians and office-holders themselves, and practical students of political techniques.

It is almost axiomatic among politicians that a candidates' political philosophy is not changed after he is elected. It may be altered during his campaign, but the surest way to obtain office-holders of a given philosophy is to select a man of that philosophy, enter him in a campaign, and work successfully to put him into office.

The application of all this requires active participation by physicians in the workings of political parties, from the ground up. It requires action in both major political parties, for the strengthening of conservatism in the nation can best be accomplished by working to strengthen the conservative elements in each party. It means expressing a political philosophy in the place where it will have an influence on the choice of candidates — at the precinct and county level where work the men who, in actuality, control the selection of candidates. It means working for the election of worthy candidates with effort, time, and even a little money in the party coffers. There is a lesson to be learned from the experience of labor unions in this field: in the early "honeymoon" phase of the New Deal, labor found ready access to the administrative and the legislative. No political effort was involved. Later, in a hardening atmosphere, political influence did not come so easily. Labor unions went full scale into political activity by enlisting candidates of sympathetic mind, entering them in primaries, and working hard for their nomination and election. The results are all too apparent today.

For those who would take a more technical interest in these matters, the U. S. Chamber of Commerce has an "Action Course in Practical Politics," which has been offered in many communities by local chambers, by industrial associations, political groups and medical societies. Personal experience with the course was rewarding enough as an interesting study of American life almost unknown to most physicians. For a practical introduction to the techniques of political action as a means of good citizenship it is heartily recommended to every conservative and every physician.

If "politics is a dirty game" it is so only by default of capable people who have failed to contribute their own efforts and time. A cliché is in order here: "All that is necessary for evil to triumph is that good men do nothing."

And where shall all this begin? In what State, what county, what city? If each of us awaits these answers, the only certainty is that it will never begin. It must begin here, and now — and go on for as long as America is a democracy.

EDITORIAL

CPC

Clinical Pathological Conference

R. E. Thomason General Hospital, El Paso

F. P. Bornstein, M.D., *Editor*

Presentation of case by James R. Morgan, M.D.

June 16, 1960

Case No. 1434

History: Dr. Nathan Kleban:

A 78-year-old Latin-American woman was admitted to the hospital on March 25, 1960. Poor appetite, weight loss, weakness and shortness of breath began in September, 1959. Persistent swelling of both legs was noticed two months later. Several days before admission the left hand became swollen.

Several doctors had treated the patient for high blood pressure and heart trouble. In 1940 the patient had surgical repair of a rectocele and cystocele in this hospital.

Physical Examination:

T. 97.6, P. 96, R. 26, B. P. 160/90.

Mucus membranes were pale. There were complete dentures. Fine rales were heard at the lung bases. Heart rhythm was irregular. A murmur was heard at the apex. The abdomen was distended, the liver palpable, and ascites present. Examiners were unable to insert a speculum into the vagina. A movable mass the size of a grapefruit in and above the pelvic area was palpated. Legs and hands were edematous. There was a mass the size of an orange in the right axilla.

Hospital Course:

The patient was treated for congestive heart failure and was described as improved with disappearance of edema. Spinal paracentesis was done. Opening pressure was equivalent to 90 m.m. of water, closing 70. Fluid was clear. Another examiner recorded the abdominal mass as 5 x 5 x 5 cm., hard, and located in the hypogastric area. Again the patient was said to be in better general condition, but she began to complain of abdominal pain. It was then noted that the abdomen was becoming more distended and the abdominal mass was enlarging.

Protein bound iodine determinations were twice reported "less than blank." Blood samples were obtained when the patient was receiving mercurial diuretics. Thyroid was prescribed.

The abdominal mass, now located in the right lower abdomen, became larger. The patient complained of lower abdominal pain.

About five c.c. of serosanguinous fluid was obtained from a cystic mass in the right axilla, following recommendation of needle biopsy of both masses "if condition permits" by the Tumor Clinic.

An estimated 500 c.c. of "yellowish fluid" was removed by paracentesis "on the right side." Nurse's notes and lab slip referred to thoracentesis and the nurse's record stated that the patient was able to breathe better following the procedure. Decubitus ulcers developed. There was a clay colored stool.

Gasping breathing preceded death the next morning, April 9, 1960.

Laboratory Findings:

X-rays: 3-28-60—A-p supine chest, abdomen—Findings consistent with arteriosclerotic cardiovascular disease with accompanying congestive failure. Abdomen negative for evidence of obstruction. Findings suggestive of calculus cholecystitis.

4-4-60—Chest A-p erect; IVP—Increasing effusion on the right, decreasing edema on the left. Normally concentrating and draining kidneys. Findings suggestive of biliary calculi.

4-8-60—Chest, A-p supine—Decreasing effusion on the right.

Blood counts: 3-24-60 — Hb. 12.4 gms., Ht. 37%, WBC 10,200, Eosin. 1, Segs. 70, Lymphs. 27, Monos. 2. **3-25-60**—Hb. 8.9 gms., Ht. 35%,

WBC 7,200, Stabs. 7, Segs. 81, Lymph. 9, Monos. 3. **3-28-60**—Hb. 13.3 gms., Ht. 42%, WBC 10,600, Stabs. 5, Segs. 89, Lymphs. 6.

Platelet counts: 3-26-60—1,156,200. 3-28-60—844,200. 3-29-60—2,029,200. 3-30-60—3,994,960. 3-31-60—2,293.200.

Prothrombin time: 3-26-60—46% (Pt. 12.5", C. 13").

Reticulocytes: 3-26-60—1.4%.

Coagulation time: 3-26-60—4'1", bleeding time 1' 55".

Urinalysis: 3-25-60—Straw, hazy, neutral, S.G. 1.013, Albumin trace, sugar negative, WBC, 10-12. Ep. cells few squam., few amorphous crystals.

Serology: 3-25-60—Negative.

Blood chemistry: 3-25-60—Glucose 88; Urea Nitrogen—22; Calcium—3.6 mEq/L; CO_2 capacity—22.5; Potassium—3.4 mEq/L; Sodium—137 mEq/L. 3-28-60—Cholesterol, total 142—41%; Cholesterol, Esters 58. 4-4-60 — Calcium — 4.1 mEq/L; CO_2 capacity—32 mEq/L; Chlorides (As NaCl)—84; Potassium—3.0 mEq/L; Sodium —139 mEq/L. 4-8-60—Chlorides (as NaCl)—103; Potassium—3.3; Sodium—143.

P.P.D. #1—coccidioidin, both negative—3-26-60.

Bone Marrow: 3-30-60—normal bone marrow.

Thoracentesis fluid: 4-8-60—Specific gravity—1.012. Cell count: 20 lymphs; few RBC; 1 Poly; Protein—1.87 gms/100 c.c.; Sugar 65 mg.%.

Spinal fluid: 3-28-60—WBC 0, polys 0, Lymphs. 0; Total protein 19 mg.%, Sugar 63 mg.%; Smear, no bacteria seen, Culture, no growth.

Stool 3-29-60—Positive for occult blood 3+.

Electrocardiogram—3-28-60—Low T waves in all leads — Digitalis effect, Inc. LBBB — Sinus rhythm.

Clinical Discussion: Dr. James Morgan:

If you will consult the protocol you will find this to be the case of an elderly woman with apparent congestive heart failure. She had a chronic illness going back six to eight months, characterized by anorexia, weight loss and cardiorespiratory symptoms of dyspnea, edema and ascites. There were also basal rales and a palpable liver. The cardiac symptoms improved on digitalis. Other significant findings included an orange sized mass in the right axilla and a movable mass described as the size of a grapefruit in the pelvis. This mass became larger and the patient complained of abdominal pain. Laboratory data do not appear to be of much value to us. I cannot explain the elevated platelet counts.

X-Ray Discussion: Dr. Vincent Ravel:

The first film shows generalized enlargement of the cardiac silhouette, increased markings consistent with congestive failure. The second one shows the vascular markings on the left clearing up considerably and decrease in the size of the cardiac silhouette and a pleural effusion extending up to the right axilla. There is also calcification in the aorta. The third film shows a decrease in the amount of effusion on the right. I don't see any evidence of metastatic disease to the lung fields or bony thorax. We have one IVP which shows normal concentration and no evidence of obstructive uropathy. I cannot identify the soft tissue mass that is supposedly palpated in the pelvis. There is some change consistent with biliary calculi.

Dr. Morgan:

From the cystic mass in the right axilla five cc. of sero-sanguinous fluid were removed, and 500 cc. of yellowish fluid were removed from the abdomen. There are no cytology reports from these aspirations. I am sure they were done. I would like to comment on these procedures. More needle biopsies, if done with reasonable precautions, can obtain us quite a deal of information. Apparently you can insert a needle into the peritoneal cavity with some impunity if you use reasonable care. All of us have seen lacerations of bowel from needles, apparently the bowel has great ability to seal off. We have seen cases where due to carelessness the needle was put through transperitoneally and a hematoma developed retroperitoneally around the ureters.

Differential Diagnosis

The differential diagnosis in this case apparently resolves around two masses, the one mass in the right axilla, and the other in the peritoneal cavity. Let's consider first the pelvic mass. In speaking now to the house staff, I don't care how you go about attacking a problem, if you want to list eight tumors of the pelvic and eliminate those one by one that is fine, but establish some regular routine. There is a pattern of diagnosis about these problems. This is the way I approach

diagnostic problems of pelvic masses. If I find such a mass I try to determine whether it is uterine, adnexal, urogenic, renal, mesenteric cyst, carcinoma of the colon and so forth. I also would like to urge you to take the patient's age into consideration. This patient was 78 years old, which permits a different approach from what you would consider had this been a young female, you would have to consider other differential diagnoses. I want to establish a pattern of thinking.

Other Possibilities

If we decide that this mass is probably ovarian we must consider other possibilities. Is this mass cystic or solid? If it is cystic, it is most likely benign; if it is solid, the odds favor malignancy. Is the mass fixed or free? Most malignant masses, particularly far advanced ones, are fixed, but occasionally may be freely moveable. In this particular case a solid, hard, freely moveable tumor was reported which in a female of this age suggests malignancy. Let's consider ovarian carcinoma. In a simple classification we divide ovarian carcinomas into primary or secondary, the primary carcinomas of the ovary continue to be the most difficult problems. Carcinoma of the cervix should never be missed for here we have a focus we can see, we can palpate and what is more important, we can biopsy.

Ovarian Carcinoma

Not so with ovarian carcinoma. However, most of these are discovered by routine pelvic examinations or as in this case, by the appearance of an abdominal mass that could be palpated. How do we determine whether these are malignant or not? Pain is a last and inconstant symptom. Is the mass fixed, is it irregular, firm? Are there symptoms related to the blocking of the ureters? More commonly, the first symptom is ascites. This patient had ascites, which may occur with fibromas, so-called Meig's syndrome. However, these fibromas are usually bilateral, and are associated with ascites and hydrothorax. The hydrothorax is usually on the right in Meig's syndrome but may be bilateral.

If we like to make a diagnosis before laporotomy in a patient with pelvic mass we biopsy the inguinal lymph nodes. These are hard and enlarged in about 60 per cent of the cases of ovarian malignancy.

High Rate of Metastases

There is a high rate of metastasis of breast tumors to the ovary, not only the Krukenberg type. In about 25 per cent of the advanced breast lesions the ovaries will show metastatic disease. Why these metastases single out the ovaries I don't know. The microscopic appearance suggests direct blood stream dissemination, mainly to the capsule of the ovary.

We have not mentioned metastasis from the uterus. In this particular case there are no uterine symptoms.

Thyroid carcinoma is prone to arise in the thoracic cage, causing tumors around the ailla and thoracic cage and they may involve the ovaries also.

My diagnosis will be papillary adenocarcinoma of the ovary with peritoneal implants and metastasis of liver and lungs. The differential diagnosis would be miliary tuberculosis, thyroid carcinoma, with metastases, breast metastasis with secondary metastases to ovary or carcinoma of the GI tract with metastasis.

Dr. Morgan's Diagnosis: Papillar adenocarcinoma of the ovary with peritoneal implants and metastasis of liver and lungs.

Clinical Diagnosis: Congestive heart failure.

Pathological Diagnoses: Papillary carcinoma of left ovary with metastasis to right axillary region.

Pathological Discussion: Dr. F. P. Bornstein:

On autopsy this was an extremely emaciated, elderly woman who weighed approximately 40 kg. There were 200 cc. of cloudy fluid in the peritoneum. The only masses found were a large mass in the right axilla and a large mass in the left ovary. This in itself represents a peculiar situation as far as metastasis of tumors is concerned. Histological examination reveals the same pattern in both masses. The pattern was that of a typical papillary, partially cystic adenocarcinoma of the ovary. As a final complication there was emaciation and pneumonia. The case is mainly represented because of the peculiar behavior of this tumor.

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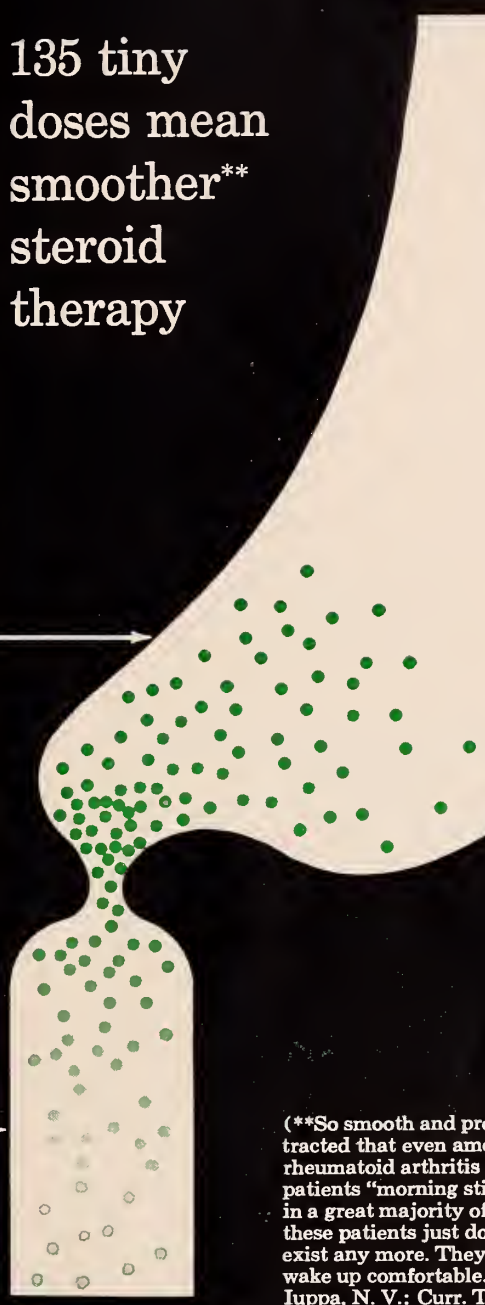
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2. Rinehart, R.E., and Marcus, H.: Incidence of Ameblasis in Healthy Individuals, Clinic Patients and Those with Rheumatoid Arthritis, Northwest Med., *54*:708 (July, 1955).

3. Webster, B.H.: Amebiasis, a Disease of Multiple Manifestations, Am. Pract. and Dig. of Treat. *9*:897 (June, 1958).

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1. Smylie, H. G.; Webster, C. U., and Bruce, M. L.: *Brit. M. J.* 2:606, Oct. 3, 1959. 2. Hodges, F. T.: *GP* 14:86, Nov., 1956.

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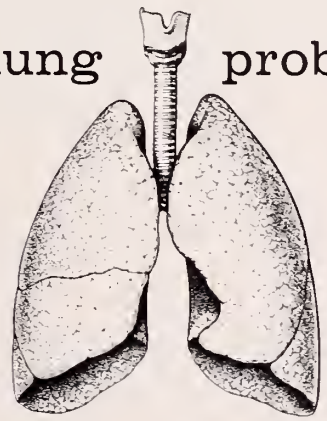
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1. Duke, C. J.; Katz, S., and Donohoe, R. F.: Demethylchlortetracycline in the Treatment of Pneumonia, Read at Seventh Antibiotics Symposium, Washington, D. C., November 5, 1959. 2. Finland, M.; Hirsch, H. A., and Kunin, C. M.: Observations on Demethylchlortetracycline, Read at Seventh Antibiotics Symposium, Washington, D. C., November 5, 1959. 3. Hirsch, H. A., and Finland M.: Antibacterial Activity of Serum of Normal Subjects After Oral Doses of Demethylchlortetracycline, Chlortetracycline and Oxytetracycline. New England J. Med. 260:1099 (May 28) 1959. 4. Lichter, E. A.; Sobel, S.; Spies, H. W.; Lepper, M. H. and Dowling, H. F.: Demethylchlortetracycline Therapy in Pneumonia, Scarlet Fever and Other Infections. A.M.A. Arch. Int. Med. 105:601 (Apr.) 1960.

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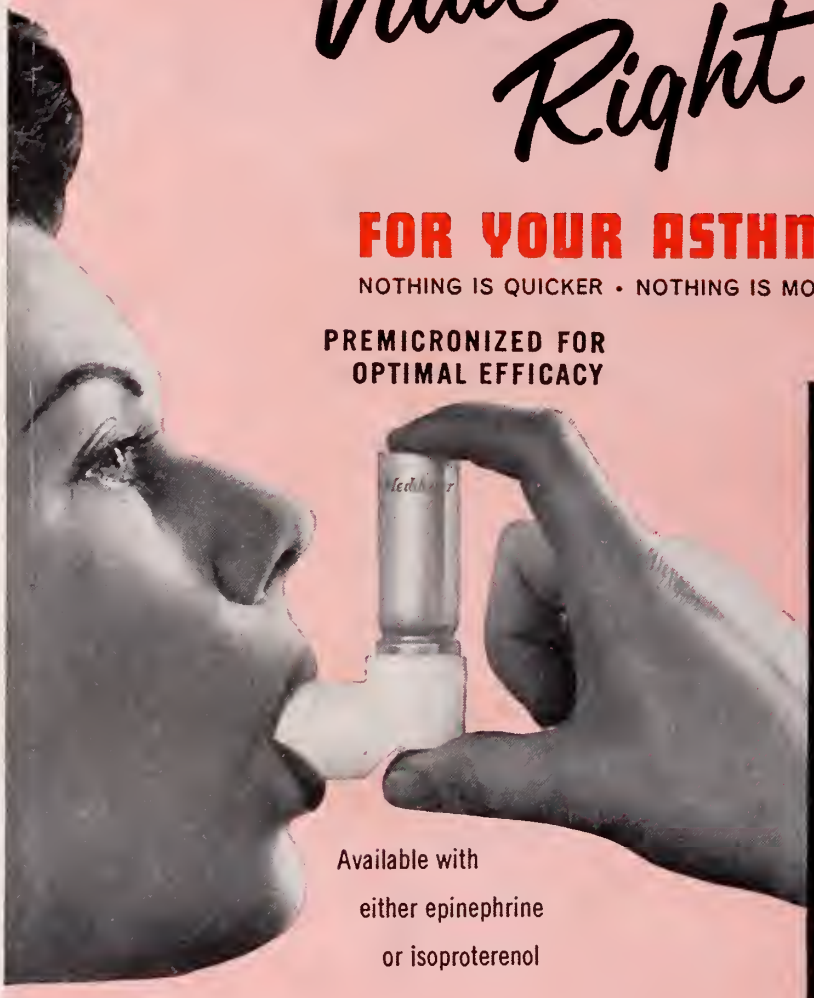
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Southwestern MEDICINE

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1. Stephens, V. C., *et al.*: J. Am. Pharm. A. (Scient. Ed.), *48*:620, 1959.
2. Salitsky, S., *et al.*: Antibiotics Annual, p. 893, 1959-1960.
3. Reichelderfer, T. E., *et al.*: Antibiotics Annual, p. 899, 1959-1960.
4. Kuder, H. V.: Clin. Pharmacol. & Therap., in press.

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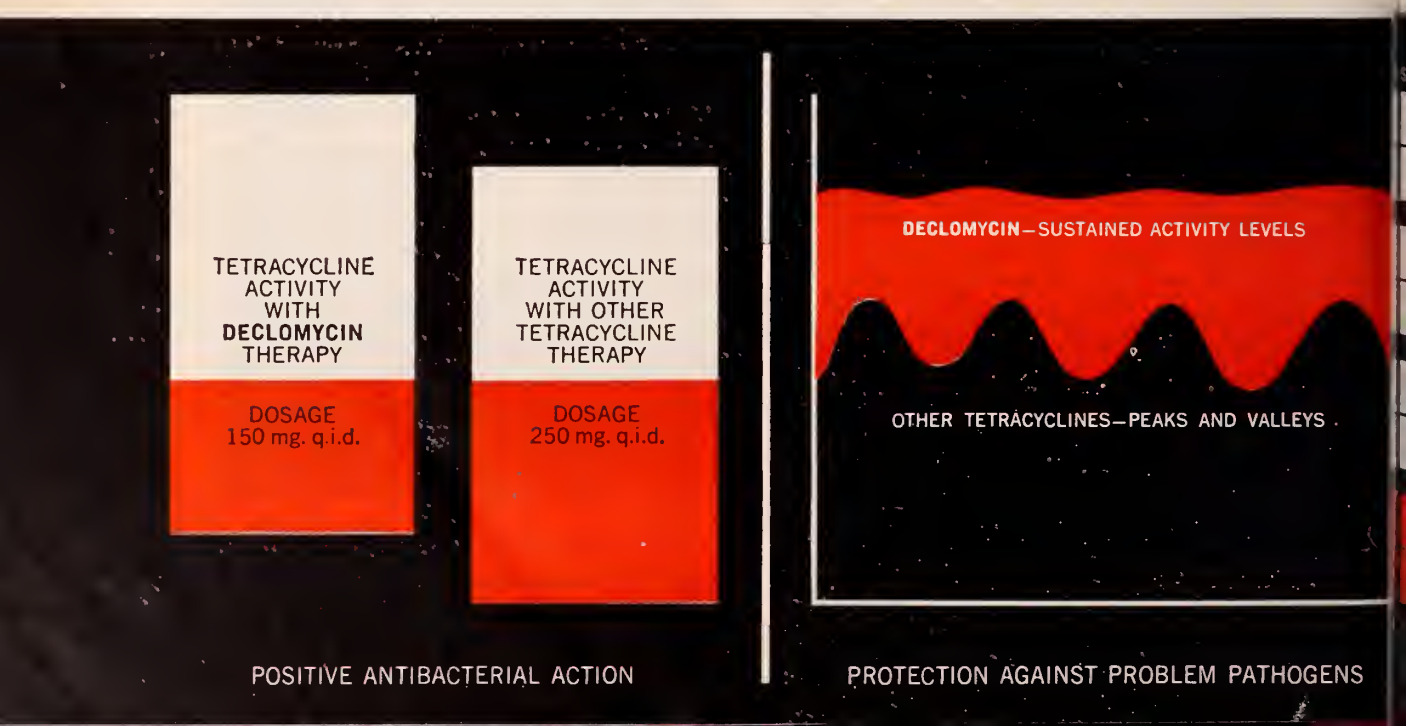
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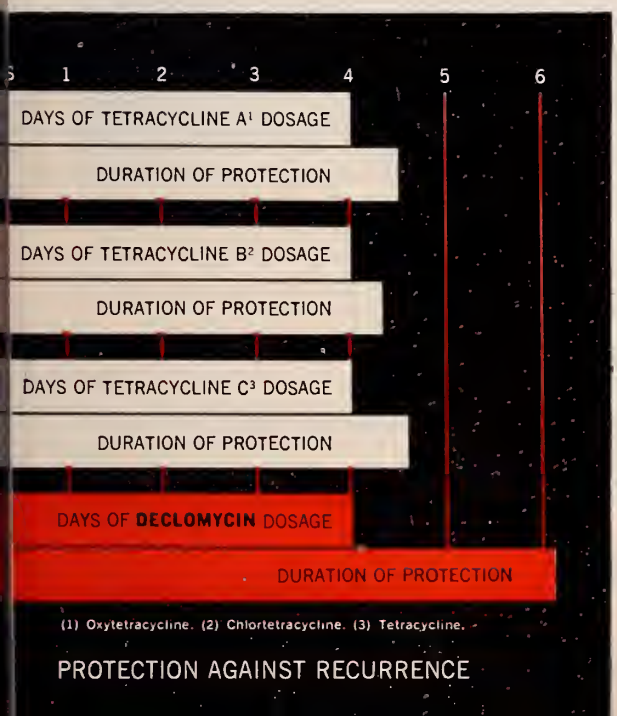


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Southwestern Medicine

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Official Journal of

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VOL. XLI OCTOBER, 1960 No. 10

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*Kearney, R. D.: Current Therap. Res. 2:127, April, 1960.

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SUMMIT, N. J.

*Coan, J. P., McAlpine, J. C., and Boone, J. A.: J. South Carolina M. A. 51:417 (Dec.) 1955. /2830M8

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SOUTHWESTERN MEDICAL ASSOCIATION

42nd Annual Meeting, El Paso, Oct. 20-22

Coming Meetings

Southwestern Medical Association. 42nd Annual Meeting, Hotel Hilton. El Paso. Oct. 20-22, 1960.

American College of Gastroenterology, 25th Annual Convention, Bellevue-Stratford Hotel. Philadelphia, Oct. 24-26. 1960.

Western Association of Railway Surgeons. Annual Meeting, Houston, Oct. 27-29, 1960.

American Fracture Association, Annual Meeting, Mexico City, Oct. 30-Nov. 4, 1960.

Southwest Obstetrical and Gynecological Society, Annual Meeting, Riviera Hotel, Las Vegas, Nev., Nov. 7-8, 1960.

Medical Society of the United States and Mexico, Annual Meeting, Guadalajara, Nov. 8-10, and Mazatlan, Nov. 11-12, 1960.

American Cancer Society, Arizona Division, Ninth Annual Cancer Seminar, Tidelands Motor Inn, Tucson, Jan. 12-14, 1961.

Texas Orthopaedic Association, Galveston, Texas, April 24, 1961.

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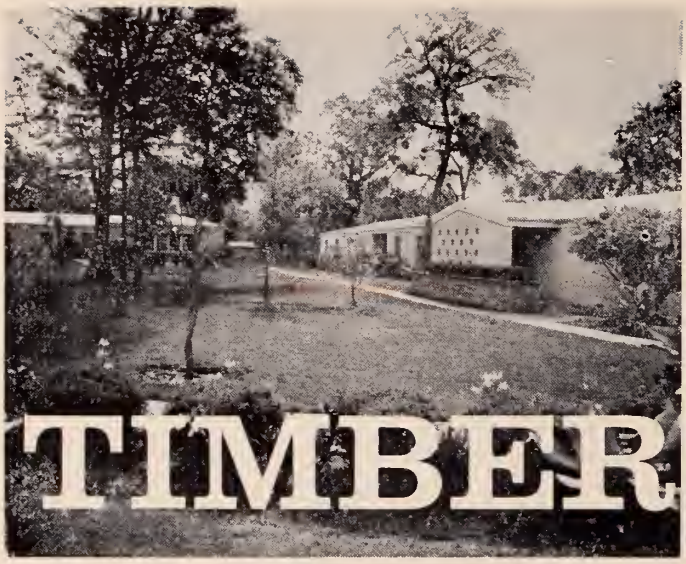
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1. Biegeleisen, H. I.: Clin. Med. 2:1005, 1955. 2. Roberts, J. T.: Clin. Med. 4:1375, 1957. ©1960, A.P.Co.

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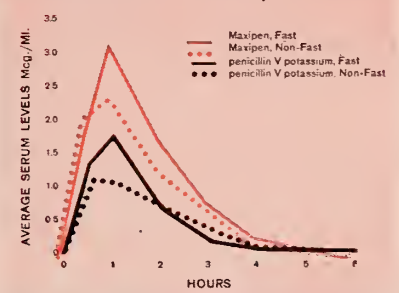
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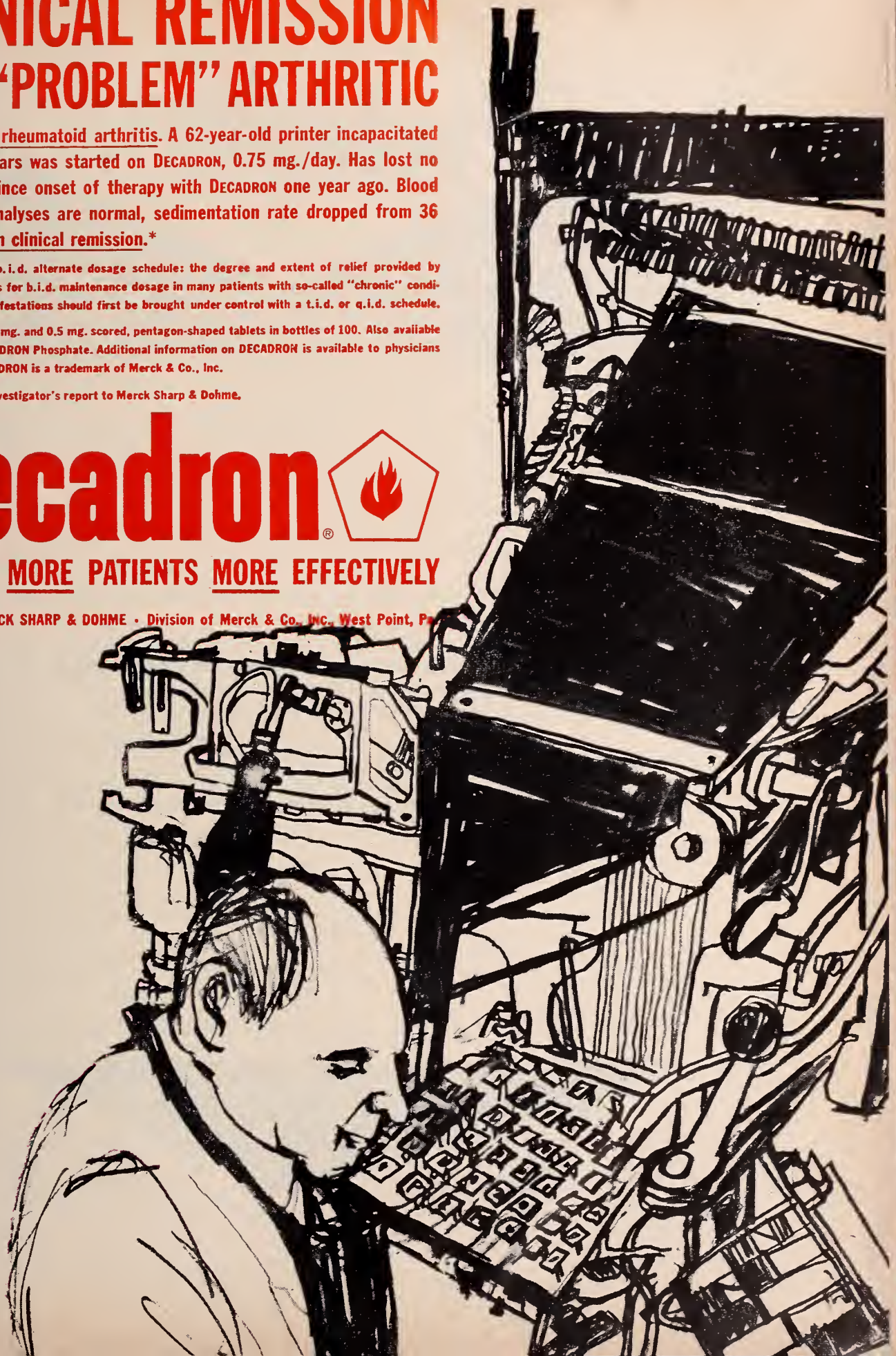
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1. Cock, T. C., *et al.*: California Med. *89*:257, 1958.
2. Bertrand, J. J., *et al.*: Vox Sanguinis *4*:385, 1959.

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SOUTHWESTERN MEDICINE

VOL. XLI, NO. 10 OCTOBER, 1960

Southwest OB-GYN Society To Meet November 6-8 in Las Vegas, Nev.

The tenth annual meeting of the Southwest Obstetrical and Gynecological Society will be held in Las Vegas, Nevada, November 6, 7 and 8, 1960, with headquarters in the Riviera Hotel.

Dr. Charles J. Newcomb, Tucson, President of the Society, has announced that Dr. Ralph A. Reis, Professor of Obstetrics and Gynecology of Northwestern University Medical School and Editor of Obstetrics and Gynecology, who has been a witty participant in the annual meeting for the last four years, would again serve on the scientific panel.

Other guest speakers will be:

Dr. R. Gordon Douglas, Professor of Obstetrics and Gynecology at Cornell University School of Medicine and Director of the American Board of Obstetrics and Gynecology.

Dr. J. P. Greenhill, Professor of Gynecology at Cook County Graduate School of Medicine and Editor of The Year Book of Obstetrics and Gynecology.

Other Speakers

Dr. Earl M. Marsh, Assistant Clinical Professor in Gynecology and Obstetrics at the University of California Medical School at San Francisco and Vice President of the American Association of Marriage Counselors.

Dr. John L. Parks, Professor of Obstetrics and Gynecology at the George Washington University School of Medicine and Director of the American Board of Obstetrics and Gynecology.

Other officers of the society are:

Dr. Robert P. O'Donnell, Las Vegas, vice president; Dr. John F. Wanless, San Diego, president-elect; Dr. Raymond J. Jennett, Phoenix, treasurer; and Dr. Zeph B. Campbell, Phoenix, secretary.

Members of the program committee are Dr. Wanless and Dr. Charles T. Franklin, La Mesa, California.

SCIENTIFIC PROGRAM

Monday, November 7

Presiding: John Wanless, M.D., San Diego, President-Elect

9:50 a.m. The Management of the Incompetent Cervix.
R. Gordon Douglas, M.D.

10:30 a.m. Surgical Treatment of Female Sterility.
J. P. Greenhill, M.D.

11:20 a.m. Operative Obstetrics.
John L. Parks, M.D.

12:00 noon An Approach to Psycho-Physiological Gynecology.
Earl M. Marsh, M.D.

1:15 p.m. Round Table Luncheon — Clover Room.
Presiding: Ralph A. Reis, M.D., and Robert C. O'Donnell, M.D.

2:30 p.m. Annual Business Meeting.

Tuesday, November 8

Presiding: Paul O. Wiig, M.D., Reno

9:40 a.m. Perinatal Problems.
J. P. Greenhill, M.D.

10:20 a.m. A Conservative Approach to Gynecological Surgery.
R. Gordon Douglas, M.D.

11:10 a.m. Is Prenatal Education of Obstetrical Value?
Earl M. Marsh, M.D.

11:50 a.m. The Significance of Climacteric Bleeding.
John L. Parks, M.D.

1:00 p.m. Round Table Luncheon — Clover Room.
Presiding: Ralph A. Reis, M.D., and D. Dalton Deeds, M.D.

Santa Fe Seminar

St. Vincent Hospital, Santa Fe
April 26, 1960

Chairman: Harry D. Ellis, M. D.
Case Presentations: Fred Soldow, M.D.
Seminar Summary: Bergere A. Kenney, M.D.

Anginal Pain

Dr. Ellis:

The first part of the program this evening is an attempt to emphasize the importance of distinguishing chest pain of cardiac origin as opposed to chest pain that is not. The two cases to be presented are not good examples of angina pectoris but they are good examples of anginal and non-anginal pain. I have selected these cases because I think they emphasize the difficulty one may have in deciding whether or not a patient's chest pain is serious in import or whether it is only serious to the extent of the discomfort experienced. Dr. Fred Soldow will present our cases in summary form. Dr. Soldow.

Presentation of Case Summaries: Dr. Fred Soldow:
Case No. 1 F. J., Age 52.

This 52-year-old plumber was seen by his physician February 22, 1957, complaining of epigastric pain. This pain began the previous night and followed a day of heavy exertion. The pain continued for several hours during the night, disturbing his sleep. By morning there was still slight epigastric discomfort and he was somewhat anxious. The patient described the pain as having been high epigastric, severe and steady. There was some burning in the substernal area. There was some aching of the shoulders but no radiation of pain down the arms.

Physical examination revealed normal findings including a normal blood pressure. The EKG, ESR, and SGO-Transaminase were normal.

The family history was negative except for the fact that a brother had died of coronary thrombosis.

Past Medical History

The past medical history revealed a similar episode of pain following exertion three months prior to this illness. This disappeared in a few hours and the patient did not seek medical advice at that time.

During the week following February 22nd the patient experienced some pain, particularly after meals and during the night. On February 26th, X-ray studies revealed the presence of a diaphragmatic hernia.

On March 3rd, he again experienced severe epigastric pain with radiation to the shoulders and down the arms. The pain persisted throughout the night, not being relieved by Demerol. He was hospitalized March 4th, with a clinical impression of strangulated diagphragmatic hernia. An electrocardiogram taken on this admission to the hospital revealed characteristic changes of myocardial infarction.

Case No. 2 Age 52.

This 52-year-old white male first sought medical advice at age 45, because of chest pain in the right parasternal area. This was associated with tenderness over the right fourth and fifth costochondral junctions and the lower third of the sternum.

This pain occurred at rest and was neither produced nor aggravated by exertion. The patient was a heavy smoker. Physical examination at that time was normal as was an electrocardiogram. Over the next seven years he was seen eighteen times by his physician, each time complaining of tightness in the chest and pain either over the lower one-third of sternum, the left parascapular area with radiation into the left upper anterior chest, or with pain confined to the left anterior chest above the level of the fourth rib.

On all these occasions the pain occurred at rest, usually in the late afternoon or evening. The patient denied pain with exertion and actually found that moderate exertion seemed to relieve the pain.

There was no radiation into the jaws or arms

and no dyspnea. He smoked an average of two packages of cigarettes daily.

Electrocardiograms were taken every six months during this period and were always normal. A series of five chest X-rays during this time were likewise normal. Routine examinations on these eighteen visits almost always showed a "trigger" area at the site of the pain.

On November 21, 1959, the patient came to his physician's office without an appointment, stating that during the preceding evening he had had a substernal pain which lasted for fifteen minutes, with subsequent complete relief. On the morning of this consultation the pain recurred in the same location, again lasting ten to fifteen minutes.

At the time of this examination, he had no pain but stated that his chest felt tight as it frequently did. Although the patient could not state how, he insisted that this pain was different than any that he had previously had and he appeared more apprehensive than usual.

Physical examination revealed only tenderness of the left second and third costochondral junctions and the lower sternum. An electrocardiogram showed no change in basic pattern but there was slight depression of RST, V-1 through 4, which was a definite change from previous tracings.

Because of the patient's severe apprehension, the suspicion of cardiac disease was not given him. However, he was placed on Peritrate and given a supply of nitroglycerin to be taken sublingually in the event of a recurrence of the pain. He was likewise cautioned to rest over the weekend and to call if he had any pain not relieved in ten minutes by nitroglycerin.

The following morning at 11:00 A.M. he fell to the floor and was dead by the time of the arrival of his physician, approximately eight minutes later.

Dr. Ellis:

Thank you, Dr. Soldow. Dr. Richard Landmann is going to discuss these cases and some of the more practical aspects of the problem of diagnosis of anginal pain. Dr. Landmann.

Discussion: Dr. Richard Landmann:

Dr. Ellis asked me to speak about the diagnosis of angina pectoris without going into the differential diagnosis which will be discussed later by Dr. Angle.

I would begin by saying that not all chest pain is angina pectoris. As you know the term angina pectoris was originally coined by Heberden in 1768 to denot a very distinctive form of pain accompanied by a sense of strangling and anxiety. Heberden used the word angina which means strangling to distinguish this pain from what he termed dolor pectoris. He also made mention of psychic components accompanying this pain, the most striking of which was a fear of impending death.

Clinically, we must remember that angina pectoris is not a disease entity but a clinical syndrome consisting of paroxysmal attacks of characteristic pain or discomfort usually located retrosternally and radiating to the precordium and the left upper extremity, especially the inner side of the arm. The pain often travels down to the fingers, sometimes to an area between the shoulder blades, and sometimes up into the left cheek.

Precipitated By Effort

It is precipitated by effort either physical or psychic and disappears with rest or is promptly relieved by nitrites and may be followed by sudden death.

Friedberg lists the essential diagnostic features of angina pectoris as 1) the paroxysmal occurrence of pain, 2) its brief duration, 3) its characteristic location and radiation, 4) its precipitation by effort and relief by rest, and 5) its relief by nitrites.

In order to establish the diagnosis a detailed history is a prerequisite. The patient must be asked to describe the pain in as much detail as he possibly can and one will find that the pain description given by the patient usually consists of a constricting pain, a pressing or boring feeling or an expanding pain. Sometimes it is described as a sense of a band tight about the chest or just a feeling of tightness. Occasionally, it will be described as a burning or heartburn and occasionally one will hear it described as a weight over the chest or a sense of choking. These sensations may be mild, severe or excruciating.

It is of interest that usually with typical anginal pain, no dyspnea is noted. Often the pain will compel the patient to remain as quiet as possible, stopping suddenly whatever he may be doing. This is rather interesting in that other types of pain do not necessarily compel the patient to remain quiet but rather provoke him to thrash or move about.

I think that a prerequisite for the diagnosis of angina pectoris is also the duration of the attack. This is rarely above fifteen minutes.

Occasionally, a patient will have typical pain at night while he rests in bed. If such happens one should be able to obtain a history of attacks with effort during the day. Failing this, I do not think one can apply the term angina decubitus.

The precipitating causes of typical angina of effort are usually bodily exertion, exposure to cold, exposure to wind, walking uphill or walking faster than usual.

Many people with angina of effort have found their own speeds and will not exceed it in walking for they know that otherwise they will have an attack.

Overeating

Often an attack will be prompted by overeating. One may obtain a history that a business man can walk very well to his favorite restaurant at lunch time but will have an attack walking the same distance back after his meal.

Emotional strains are not uncommon as a cause of angina of effort. Other precipitating causes may be hypoglycemic attacks, the administration of thyroid extracts, excessive smoking, and apparently nightmares.

Now as to the definite diagnosis of angina pectoris the patient's history is one of the most important factors. Physical examination can be entirely negative, however, if evidence of cardiac disease is present, the diagnosis of angina pectoris is supported.

In many cases nothing will be found. The pulse, blood pressure, and respiration will be quite normal. In such instances, we resort to such tests as the exercise tolerance test, the master-two-step test, the hypoxemia test by which the subject breaths a mixture of carbon dioxide, oxygen, and 90% nitrogen for about twenty minutes unless cardiac pain intervenes, or an epinephrine test.

An electrocardiogram is taken before and after these tests and in many cases of true angina typical changes, such as depression of ST segments greater than one mm.. especially in leads II and V-5., are produced.

The epinephrine test has been given up by many people because of the danger of severe reactions, including the precipitation of an acute myocardial infarction.

If we are going to apply the foregoing data to the cases presented tonight I would say that case number one certainly did not have angina pectoris.

The pain in case number one began at night, although following a day of heavy exertion. However, the pain continued for several hours which is certainly not typical. We know that he had a diaphragmatic hernia which certainly could explain his pain. However, on March 3rd the pain was much more severe and persisted. This pain was due to myocardial infarction and was not the typical pain of angina pectoris.

Case number two had pain over his costochondral junctions of the fourth and fifth ribs and the lower third of the sternum which occurred at rest and was not influenced by exertion.

This certainly does not reflect the typical pain of angina pectoris.

"Trigger" areas can confuse one and occasionally are due to angina or myocardial infarction. I have previously reported two such cases with electrocardiographic changes incident to underlying cardiac disease.

This patient stated on November 21, 1959 that he had again some substernal pain which lasted for fifteen minutes with complete relief subsequently and then a recurrence the following morning of the pain which again lasted for ten or fifteen minutes. Unfortunately, it is not known whether the patient had exerted himself shortly before these pains occurred, however, the patient did volunteer the information that this pain was different from the ones previously experienced and he appeared much more apprehensive than usual.

I assume that the electrocardiogram was taken without exercise. There was definitely a depression of RST, V-1 through 4 which may very well have been due to coronary insufficiency. It was later proved that this man most likely died from an infarct, and the two episodes of pain immediately before death constitute definite angina pectoris.

Dr. Ellis:

Thank you, Dr. Landmann. Are there questions or comments concerning Dr. Landmann's discussion? If not, we will go to Dr. Richard Angle who will discuss the differential diagnosis of anginal pain. Dr. Angle told me the other day that he sees two to three patients a week complaining of pain in the chest that turns out not to be anginal

pain. Certainly this differential diagnosis is very important in clinical practice.

Differential Diagnosis: Dr. Richard Angle:

I am sorry to say that the second patient presented this evening was a patient of mine. Nevertheless, I feel that originally his pain was not angina. This is likely a man who had non-coronary pain for a long time and who also had progressive coronary artery disease which became evident only shortly before his death.

In considering the causes of chest pain, it is well to remember that errors of commission may be just as harmful as errors of omission. It is wrong in my opinion to incorrectly place a diagnosis of angina pectoris and hence a diagnosis of serious heart disease on a healthy patient as it is to conconclude that anginal pain is of non-cardiac origin. Many patients have needlessly been restricted and deprived of life insurance and suffered serious mental anguish by the unwarranted diagnosis of angina. It certainly behooves every physician to make the diagnosis with certainty.

There are certain factors that are important in considering the differential diagnosis of chest pain, especially the character of the pain, its manner of onset, and its manner of relief.

Of other importance are the age and the sex. It is very rare for a woman under 50, unless she is hypertensive or diabetic, to have coronary artery disease. It is said that actual myocardial infarction in women without these diseases below the age of 65 is quite rare.

On the other hand, on the basis of the frequent autopsy findings of coronary atherosclerosis in otherwise healthy young male Korean war casualties, Green in a recent paper in the A.M.A. states that all males over the age of twenty should be considered to be suffering from coronary artery disease.

Dr. Landmann has discussed the diagnostic symptoms of angina pectoris and the electrocardiographic confirmation where possible. Other causes of chest pain should be eliminated however. In speaking of angina pectoris, not anginal pain, it is understood that the patient is suffering from intermittent chest pain with complete relief of pain between attacks.

This fact alone will help eliminate patients who are acutely ill and suffering from such diseases as acute pericarditis, aortic aneurysm, spontaneous pneumothorax, mediastinal emphysema, epidemic pleurodynia and pulmonary emboli.

Especially to be considered are the recurring chest pains commonly seen in clinical practice. The first of these, and I think one of the most common, is that pain that is caused by skeletal, muscular, or nervous disorders. Included here are those of spinal root compression in the thoracic or cervical spine, either as a result of abnormal posture, osteoarthritis, scoliosis, or cervical disc. These all may cause irritation of a nerve root. This is not a diagnosis that can only be suspected but can often be confirmed by the finding of a tender area over the involved segment in the spine.

In addition, pain may be due to "trigger areas" of the various syndromes which go by the name of Tietze's Syndrome, the Xyphoid Process Syndrome, the Manubrial-Sternal Syndrome, the Costochondral Syndrome or the Parascapular Syndrome. In these cases there may be persistent or recurring chest pain and pressure on these areas will usually produce pain.

In addition, relief of these pains may be obtained very simply either by injection of local anesthetics or by ethyl chloride spray. Preeruptive herpes zoster should not be forgotten as a cause of pain and a postherpetitic pain may occasionally give diffculty in the differential diagnosis.

Pain Is Persistent

In considering these diseases or syndromes it should be noted that as a rule the pain is more persistent, it is slow to be relieved, and it is apt to be related to change of position but not to exertion in general.

As a rule relief may be obtained in these patients by correction of the underlying problem through corrective exercises, cervical traction, and other local means.

Another cause of chest pain is a thoracic tumor either in the lung itself or in the mediastinum. This pain has different characteristics and is apt to be quite persistent and lacking in relationship to exertion. This is the reason why many of us routinely x-ray the chest in patient's complaining of chest pain.

When minor abnormalities are noted in the chest x-ray, it is essential that follow-up films be taken.

A third cause of chest pain is pain referred from below the diaphgram from the gastro-intestinal and biliary tracts. Cardio-spasm or esophageal spasm will frequently cause pain over the lower sternum which may be very sudden in onset and which may stimulate anginal pain.

In these cases the pain is usually aggravated by eating or swallowing, may be temporarily relieved by belching, and is usually susceptible to diagnosis by esophagrams or other x-ray studies.

Hiatus hernia or diaphragmatic hernia is another disease to be considered. Here the pain is usually different, is usually aggravated by eating, may occur in the recumbent position, and may be relieved completely by the patient being upright.

Pylorospasm, peptic ulcer, and chronic gastritis are other causes of pain that may be referred into the lower chest and stimulate cardiac pain.

Cholelithiasis & Cholecystitis

Cholelithiasis and cholecystitis should be considered. In this connection it should be remembered that Wakefield in 1940 showed that distention of the gall bladder at the time of cholecystectomy may produce inverted T waves which subsequently return to normal.

A careful history should elicit the expected symptoms and a cholecystogram may prove the diagnosis. It should be remembered that chronic cholelithiasis and cholecystitis may aggravate a pre-existing angina pectoris.

A fourth cause of chest pain is the psychogenic cause. This is difficult to arrive at because there are so many other possible causes. As a rule, however, the patient has other manifestations of anxiety and there may be unusual fear in the patient concerning the existence of heart disease. The latter may have been inadvertantly augmented by a previous examination by a physician or through a relationship to someone with heart disease.

It should always be remembered that the diagnosis of angina pectoris must rest on firm ground. David Davis in his monograph on the differential diagnosis of chest pain has said it is wise to beware of the diagnosis of atypical angina pectoris, because it usually indicates doubt on the part of the physician. It is also wise to remember that two diseases or two processes may exist in the same patient, as shown in the two cases presented tonight. One was a patient with a hiatus hernia, capable of producing chest pain, who subsequently developed a myocardial infarction. The second patient who undoubtedly had skeletomuscular causes of chest pain over a period of years, did develop angina pectoris and died presumably of a myocardial infarction.

Dr. Ellis:

Thank you, Dr. Angle. I was surprised in reading about this to find that there are some important things that a physician can do for a patient with anginal pain. There are not only conservative measures but in some instances surgical therapy may be of benefit. Dr. Richard Streeper is going to talk to us on this subject and also I've asked Dr. Streeper to discuss prognosis in persons suffering from angina pectoris. Dr. Streeper.

Treatment and Prognosis: Dr. Richard Streeper

Medical Methods of Treatment

Obesity is one of the first factors to be corrected when present in a patient with anginal pain. If there is an excess intake of nicotine or alcohol, this should be corrected as much as possible.

Congestive failure is sometimes associated with an increase in the frequency of anginal attacks, hence proper management of congestive failure should be employed.

Conversely, at times in angina, congestive failure is associated with a reduction in frequency of anginal attacks. Any hypertension which exists should be treated. If there is anemia the cause should be established and treatment instituted. Thyroid disease can increase the frequency of attacks. This should be corrected. There are a number of other factors. The point is that if there is anything else contributing to the angina the first approach must be to try to correct these before attempting to control the symptoms specifically with drugs.

In so far as drugs are concerned, digitalis and quinidine are ineffective. Khellin was in vogue for a while, but most people are convinced that it is not effective in doses which can be tolerated. Most people are agreed that peritrate is not very useful. Nitroglycerine is still the drug of choice. This gives prompt relief which tends to last half an hour and there is very little danger in its use.

When treatment with nitroglycerine is insti-

tuted, the patient is cautioned to take the dose in a sitting position instead of in the erect position in order to avoid postural hypotension.

Aminophylline, and the other theophylline derivatives are not usually effective in angina pectoris. There has been some experimental work which would indicate that these drugs do improve coronary blood flow.

Heparin has been used by several groups, by injection twice weekly, and some reduction in frequency of anginal attacks has been reported. This work cannot be confirmed by all observers. It is an expensive form of therapy and certainly no more effective than nitroglycerine.

Surgical Methods of Treatment

Beck proposed surgical procedures for this condition before general interest was aroused. His Beck I procedure is still in use. The Beck II procedure has been abandoned. The Beck I procedure involves the use of a rotary burr, scarifying the epicardium, partial ligation of the coronary sinus, and sprinkling of silica dust over the surface of the heart.

This has been modified by others. Some claims have been made for these procedures, but as in all of the surgical approaches that will be mentioned, one must consider the profound psychological effect of the operation in evaluating results and also one must consider the risk of the operation. The risk is still great and most of these operations have been reserved for the patient with angina decubitus or with very frequent attacks of angina.

Another surgical approach has been done by Weinberg which consists of implanting the internal mammary artery into a tunnel made by blunt dissection into the myocardium. This results in a large hematoma. Theoretically, there should be many collateral channels developed from this but autopsy specimens have not indicated the development of sizable channels. There have been a number of smaller channels developed but most of them would seem incapable of carrying significant blood flow. The initial favorable reaction noted in dogs in this procedure has been attributed by some to a reactive hyperemia which does not persist. Another surgical approach has been that of internal mammary artery ligation. This was practiced first by Lillehei. This was thought at first to be a startling discovery. Theoretically, this should increase the blood flow to the myocardium through the cardiophrenic artery. Coronary flow studies in dogs have indicated a minor increase. In evaluating the procedure simple skin incisions only have been made and these patients sometimes experienced marked relief of pain.

It is interesting in this respect that Glover ligated the right internal mammary artery and not the left, and relieved the pain on the right side, which indicates to me that there may be some rationale for the method aside from the psychological effect.

Coronary Endarterectomy

More recently, Bailey's group in particular have performed coronary endarterectomy. There are others doing the same procedure. The mortality rate is still high for this operation. The idea behind this is that early in coronary disease there is segmental involvement of the coronary vessels. If there is segmental involvement, an endarterectomy is more apt to be effective.

Radiologic methods demonstrating the coronary circulation have improved remarkably in recent years, particularly with the use of timing devices so that the material can be injected during diastole. Beautiful visualization of the coronary vessels has been obtained. Unfortunately if a proximal part of a coronary vessel is occluded, one does not know whether the occlusion involves the entire length of the vessel or if there is segmental involvement.

Possibly with the passage of time and more case studies, such cases can be more properly selected for endarterectomy. At the present time, in my opinion, the surgical approach to coronary heart disease is still in an experimental stage.

Treatment of Choice

At present I believe a treatment of choice for relief of intractable angina when conservative measures fail is the use of I 131 therapy. This is a safe procedure and is often effective. There are some theoretical hazards in the fact that serum cholesterol tends to rise in a hypothyroid patient, but the advantages of this procedure certainly outweigh the disadvantages.

I should mention in passing, posterior rhizotomy as a historical landmark. So many patients developed a radiculitis following this procedure that it

has been discarded. Sympathectomy has been of some benefit but the operative risk is high.

Prognosis of Angina Pectoris

It is extremely difficult to say to any one coronary patient or anginal patient that he has so many years to live. There is a great weight of statistical evidence that can be utilized to more or less categorize these people into groups.

It is known that people who have strong family histories of coronary disease are apt to die at an earlier age than those who do not have a family history. The presence of other lesions such as syphilitic aortitis with angina is particularly ominous.

Rheumatic heart disease with aortic insufficiency and angina is also rather ominous. Calcareous aortic stenosis developing in an elderly patient associated with angina pectoris is associated with a poor prognosis.

People in their early 40's or less who have a coronary episode are much less apt to survive that attack than are people who are 65 or older. Here a mortality rate of three to five per cent in older patients may be compared with 35 per cent in younger patients.

Women tend to have a higher mortality than men.

Study of 6882 Cases

In a followup study of 6882 cases of angina pectoris lasting from five to twenty-three years, about 15 per cent died in the first year after onset.

More and more evidence has accumulated to indicate the influence of prolonged anticoagulant therapy on prognosis in patients with angina pectoris.

The Suzman group followed 82 cases treated continually over a period of three months to six years, and compared their results with 88 untreated controls over the same period. They found the mortality was reduced from 33 per cent to 7.3 per cent. The frequency of recurrent coronary thrombosis was reduced from 24 to 17 per cent.

In another series Owren reported 128 cases of uncomplicated angina pectoris treated from one to five years with dicumerol or dindevan. There were only 10 instances of coronary thrombosis and the mortality during the first year of treatment was five per cent which represents a considerable reduction from the expected 15 per cent.

Dr. Ellis:

Dr. Bergere Kenny will summarize the discussion. From the way everyone has covered their subject this evening I wonder if there is anything left for him to say?

Dr. Kenney:

Seminar Summary: Dr. Bergere A. Kenney:

Actually there is still a lot to say. Driving up to Los Alamos the other day, trying to get a little peace and quiet and do some reading on this, I got stuck behind a truck going up a hill. This was a big van-like truck. I couldn't pass it because of traffic and then it pulled over to the side of the road, the truck driver got out and beat on the back of the truck with a long steel pole. Then he got back in, drove on for another mile, got out, and repeated this procedure. Finally he arrived at the top of the hill and again got out and beat on the back of his truck. I could have passed him at this point but I was so curious that I stopped and asked him what he was doing. He said "Well look, I'm driving a three ton truck and it is loaded with five tons of canaries. I've got to keep two tons of those birds flying all the time."

In a similar way, we have at least two tons of material on coronary disease and angina pectoris in the flying stage and this includes Beck's operations, endarterectomy and a variety of other things.

I think that one thing we tend to overlook in a discussion which is limited to the symptoms of a syndrome, as we have done tonight, is the nature of the underlying disease, which is afterall, coronary artery disease.

There have been a number of studies done all bearing out approximately the same figures, namely, that in autopsy material some 75 per cent of patients who had clinical angina pectoris also had two or three coronary arteries completely occluded. Many of these patients had normal electrocardiograms at rest. Occlusion of a coronary artery therefore does not necessarily imply the presence of a myocardial infarction. These arteries can occlude gradually and without clinical damage to the myocardium.

In one large series, the average number of occluded coronary arteries per heart in patients with clinical angina was 2.5. This certainly indicates that you can close off a coronary artery

without having an associated myocardial infarct. Furthermore, a myocardial infarct may develop without occlusion of a coronary artery. I'll mention this later.

Another thing, I think we tend to forget, is that the contraction of the heart muscle forcibly shuts off coronary blood flow during systole. Therefore, anything which affects cardiac rate (tachycardia, arrhythmia, etc.) will cut down on coronary perfusion because of the shortened diastolic time. Likewise, anything that will reduce diastolic pressure will tend to reduce coronary perfusion. Aortic insufficiency, for example, in which the mean diastolic pressure is low, is frequently associated with anginal pain. The same thing is true of shock and anything else that will lower the diastolic mean pressure.

Another factor to be considered, and this is more of a theoretical factor, is the matter of the diameter of a coronary vessel. The mean flow through a tube is dependent on several things, among which are the pressure differential between the ends of the tube, the length of the tube, and the viscosity of the fluid. The most important factor is the diameter of the tube, the flow being proportional to the radius multiplied to the 4th power. So if there is a slight decrease in diameter there will be a relatively marked decrease in the possible flow through the tube.

Differential Diagnosis

In considering the symptoms and differential diagnosis of anginal pain, one is confronted not only with the differential points mentioned by Dr. Angle but also with the problem of variation of symptoms in true angina.

Work has recently been done in the course of open heart surgery in which electrocardiographic tracings were taken directly from the epicardium, using small cotton tipped electrodes.

In the anginal patient, the typical anginal patient with a normal electrocardiogram, there were abnormalities found in areas immediately involved, that is in areas of myocardial ischemia. These consisted of S-T depressions, the typical anginal pattern. And incidently in this group there were a number of areas of involvement, not just a single area.

It was also found that there was what the authors called a "variant form" of angina in which involvement was much more localized. It seemed to involve a single artery or branch of a single artery and over these areas there was S-T elevation, not depression. There was reciprocal S-T depression in the surrounding areas.

In these individuals the clinical course was characterized by a prolonged type of pain without relation to exertion, emotion, or the usual precipitating factors. When these patients developed coronary occlusion there resulted a single clinical infarct, so that in the so-called "variant form" you have a syndrome of an impending single occlusion, whereas in typical angina there is more of a diffuse process involving many areas of myocardial ischemia, without S-T elevation and the so-called "injury" pattern in the electrocardiogram.

Stellate Ganglion Block

One thing I would like to ask about is stellate ganglion block or stellate ganglionectomy. These procedures are said to be effective in the relief of pain and their use is criticized on the basis that they take away warning signals from the individual. If you have a patient, with angina decubitus, it would seem to me that stellate ganglionectomy or stellate ganglion block might have a place.

In concluding my remarks I would like to mention a book I read recently in Los Alamos. It was written by Hans Selye, and the title was "The Chemical Protection of Cardiac Necroses." The book was very provocative, and I use the term provocative in the usual sense, meaning that I really didn't understand what he was talking about. His thesis appeared to be this: There are a number of conditions in which myocardial necroses occur. Diphtheria, digitalis intoxication, potassium deficiency, magnesium deficiency, and other agents may produce myocardial necroses. Characteristically they develop areas of local myocardial necrosis, which are followed later by replacement with scar tissue.

Selye has been able to produce this type of lesion by using several of the corticosteroids, in combination with certain salts of sodium, mostly the phosphates, the sulfates, or chlorides.

He was able to prevent this type of necrosis by using, in addition to the corticosteroids and the sodium salts, either potassium chloride or magnesium chloride. These latter salts appear to protect the myocardium from this type of necrosis.

Selye felt that in many myocardial infarctions—even fatal ones, that up to 30 per cent of these will not be associated with a clinical or anatomically demonstrable occlusion of a coronary vessel. He feels that there is something in the heart muscle in conditions of ischemia or anoxia, something of a biochemical nature, which results in exactly the same type of necrosis that one can induce by using a combination of corticosteroids and salts in animals.

In speculating as to the future, Selye felt that there may be a way of finding the physiologically balanced electrolyte pattern by which a certain amount of this damage can be avoided. So perhaps the future of coronary artery disease and angina pectoris will come to the door of physiologists, the biochemists, and the internists rather than the surgeon.

Dr. Ellis.

We have a few minutes left for discussion. Dr. Derbyshire, can you answer Dr. Kenney's question regarding stellate ganglionectomy for anginal pain?

Dr. R. C. Derbyshire:

All I can say about that is that I wish the problem of intractable angina could be solved by such a relatively simple procedure. Unfortunately, it is not this simple as stellate ganglionectomy alone will not control the pain.

As you know, Smithwick has written an excellent book on the sympathetic nervous system and I think it is still valid. He was doing a much more extensive operation than stellate ganglionectomy. He not only took out the stellate ganglion, but the entire upper chain, including the first, second, third and fourth thoracic ganglia.

I do not believe that stellate ganglionectomy is an adequate operation for anginal pain. In the case of patients who have unbearable pain, and are completely incapacitated by this pain, the more complete operation seems justifiable. My understanding is that even with this operation only about 70 per cent of these patients are relieved of their pain.

I would like to ask three questions. #1—What is the rationale of heparin therapy for anginal pain? #2—How is it given? #3—Dr. Streeper, would you say a little more about coronary thromboendarterectomy. I am interested in this because of Longmire's work. If I recall this correctly, in his original report he had 4 or 5 cases, one of whom died postoperatively and in the remainder he thought his results were promising.

Dr. Streeper:

In answer to your question about heparin, it's given intramuscularly once or twice weekly in dosage of 50 to 100 mgs. According to Graham there has been a marked reduction in the number of attacks of angina pectoris in 55 of 59 patients. As mentioned, these results have not been uniformly confirmed.

Longmire, in Los Angeles, and Baily, in Philadelphia, have both been doing coronary endarterectomies. Thus far, their series is small and it is too early to be sure of the surgical risk and too early to know the ultimate benefits.

Dr. Richard Angle:

Dr. Longmire has recently reported an extension of his series of thromboendarterectomy patients and he reports a continuing mortality of around 35 per cent. An interesting new development here is the use of a special polyethylene catheter with an overlapping loop in the end which approximates the circumference of the root of the aorta. Threaded through the femoral artery, this delivers diodrast to the orifices of the coronary arteries in high enough concentration to produce excellent visualization of the arteries.

Another aspect of the treatment of angina pectoris is the anticipatory use of nitroglycerine. When an act is to be undertaken which usually precipitates angina, nitroglycerine is taken beforehand in order to prevent this attack.

One last comment is that which concerns a recent paper in the J.A.M.A. which gives a very preliminary report on the use of antimalarials such as plaquenil as a desludging agent in certain thrombotic disorders. Good results in angina were reported but the test period was too brief to be significant.

Dr. Ellis:

If there are no other questions or comments, this will conclude our seminar this evening. Our next seminar will be about Hemolytic Disease of the Newborn.

Peptic Ulcer and Allied Diseases

Treatment with a Single Preparation

ARNOLD ALBERT, M.D., *San Antonio*

The diverse etiological factors and the multiplicity of symptoms involved in peptic ulcer dictate for practical therapeutics the use of a combination of drugs for treatment, although ideally all medication should be used individually for its specific action. Most patients with peptic ulcer have a history of recurrent gastric disturbances of several years' standing. During the periods of attack, such symptoms as dyspepsia, belching, flatulence, heartburn, constipation, insomnia, irritability, nausea, vomiting, pain and loss of weight commonly occur.

Among the well known etiological factors which play a role in this complex disease are erosion, both mechanical and chemical; local tissue resistance; systemic and constitutional diathesis; neurogenic and personality factors. Modern peptic ulcer therapy is, therefore, directed in three channels:

1) The neutralization of gastric acid secretions with antacids.

2) The reduction of vagotonia with anticholinergics.

3) The control of emotional stress and stomach activity by mild sedation.

The purpose of this paper is to report the excellent clinical results obtained with a single preparation combining aluminum hydroxide gel, ambutonium bromide, butabarbital and a constipation-inhibiting dose of magnesium hydroxide. In the neutralization of acids, aluminum hydroxide gel has been widely used because it has a tendency to coat the devitalized and ulcerated areas, thus providing physical protection against further digestive trauma.

At the same time it buffers the stomach pH between three and five, inactivating pepsin and relieving pain. The atropine-like action of ambutonium bromide has been reported.[1,2,3] This anticholinergic action reduces gastric juice volume and acidity. The concentration of butabarbital in the preparation was selected as sufficient to allay anxiety and deal with insomnia without causing daytime drowsiness.

Materials and Methods

The treatment to be described was used in a group of 28 patients, 16 males and 12 females, ages 32 to 74 years. Thirteen of these had duodenal ulcer, confirmed by x-ray; three had gastric ulcer, one recurrent and two confirmed by x-ray; four had gastritis without evidence of ulcer on x-ray; and eight suffered from various functional diseases (4, pylorospasm with hyperacidity syndrome; 2, spastic colon; 1, diverticuli of the descending portion of the duodenum; 1, diaphragmatic hernia.)

The medication* was an aluminum hydroxide suspension containing in each teaspoonful 2.5 mg. ambutonium bromide, 8.0 mg. butabarbital, and the equivalent of one-quarter teaspoonful of milk of magnesia. For the majority of the patients the prescribed dose was one teaspoonful taken four times a day, before meals and at bedtime. In one case the dose was increased to one and one half teaspoonfuls, and in three cases to two teaspoonfuls.

*Aludrox® SA-Wyeth Laboratories, Philadelphia, Pennsylvania

A bland diet was recommended for patients with ulcers, gastritis and hyperacidity; the diets of other patients were restricted according to their particular needs. Increased rest was suggested and the patients were advised in resolving problems which caused anxiety. The patients were examined after one week, four weeks and eight weeks and thereafter at varying intervals.

Results

Twenty-seven of the 28 patients included in the study tolerated the medication well. One patient discontinued its use because of minor side effects (see below). The clinical response in the group is summarized in Table I.

TABLE I

Clinical Response Observed in Twenty-seven Patients

Diagnosis	Number of Cases	First Week				Fourth Week			
		Excellent	Good	Some	None	Excellent	Good	Some	None
Duodenal Ulcer	12	5	4	2	1	11			1
Gastric Ulcer	3	1	2			2	1		
Gastritis	4	3	1			3	1		
Functional Diseases	8*	6	1			6	2		
Totals	27	15	8	2	1	22	4		1
		(57.7%)	(30.8%)	(7.7%)	(3.8%)	(81.5%)	(14.8%)		(3.8%)

* One patient in this group did not report for the first week check-up.

Twenty-three patients (88.5 per cent) reported good or excellent response after the first week of therapy. After four weeks, 26 patients (96.3 per cent) considered their response good or excellent. One patient reported no improvement after one week and was still unimproved after four and eight weeks of therapy. The treatment was discontinued at this time. This patient had a duodenal ulcer and diverticulosis of the colon.

Three patients with a diagnosis of duodenal ulcer were x-rayed after eight weeks of therapy. In one patient the ulcer was completely healed and in two there was partial healing. Three additional patients from this group were x-rayed after twelve weeks of therapy. One patient was examined during surgery for removal of common duct stones at this time. In all four cases the ulcer had completely healed. Two other patients in the group were completely asymptomatic; clinically they appeared to be healed.

The response of one patient with gastric ulcer deserves special mention. When first seen, this patient had lost forty pounds and had hypoproteinemia from vomiting and inability to retain food. X-ray revealed a marked ulcer crater in the lesser curvature (Fig. 1). Medical therapy was instituted preparatory to surgery.



Figure 1. E. B., X-ray showing gastric ulcer before treatment.

At the end of one week he reported his clinical response as good and after four weeks as excellent. The patient regained his weight. There was no bleeding after the first week; his blood count returned to normal after oral medication with iron, without transfusion. Eight weeks after therapy began, x-ray showed tremendous healing (Fig 2). Plans for surgery were abandoned and the patient was continued on maintenance therapy.

The suspension was considered "excellent" with regard to taste, color etc., by 23 of the 28 patients; three others considered it "good;" one considered it "fair;" and one considered it "poor."



Figure 2. E. B. X-ray showing marked healing after eight weeks of therapy.

Twenty-four of the patients continued the medication as maintenance therapy.

Minor side effects were reported by only two of the 28 patients studied. One suffered from nausea and faintness during the first three days of therapy. This patient tolerated the aluminum hydroxide gel with magnesium hydroxide, without the ambutonium bromide and butabarbital. The other patient suffered from constipation. However, he accepted the combined medication as "excellent" and has continued its use as maintenance therapy; cascara sagrada was prescribed to relieve his constipation.

Two patients with duodenal ulcer attempted to stop the medication during maintenance therapy. One reported a recurrence of indigestion and the other a recurrence of hyperacidity. In both cases the symptoms were relieved when medication was begun again. Two patients with pylorospasm elected to interrupt therapy and both complained of a recurrence of symptoms during the period of interruption.

Comments

The excellent clinical response observed indicates that the combination of aluminum hydroxide, ambutonium bromide, magnesium hydroxide, and butabarbital, in the combinations used, produced an effective, single preparation for the treatment of peptic ulcer and other upper gastrointestinal diseases. Prompt relief from symptoms was experienced by the majority of the patients. This was probably reflected in their acceptance of the medication as a palatable preparation. The simplicity and convenience of this form of therapy appeals to both the doctor and the patient.

Both the antacid component and the anticholinergic drug contribute to the singular effectiveness of this combination in controlling gastric hyperacidity. Ambutonium bromide exerts an atropine-like action on the effector organs innervated by the parasympathetic system and a blocking effect on the autonomic ganglia of the sympathetic and parasympathetic systems.

These two effects are anticholinergic and both combat the vagotonia which is characteristic of the ulcer diathesis. The influence of vagotonia on both acidity and gastric activity is well recognized.

Summary and Conclusions

(1) The effectiveness of a combination of aluminum hydroxide, ambutonium bromide, magnesium hydroxide, and butabarbital in the treatment of peptic ulcer and allied diseases was studied in twenty-seven patients. (2) The preparation relieved symptoms promptly in 26 of the 27 patients. (3) Minor side effects were reported in two of the 28 patients who began treatment. These included nausea, faintness and constipation. (4) The preparation was well accepted by the patient. The simplicity of this form of medication appealed to both the patient and the doctor.
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References

1) Cheney, L. C. et al.: Basic Amides as Antispasmodic Agents. J. Org. Chem. *17*: 770-777, May, 1952.
2) Judge, R. D., Bolt, R. J., Hirschowitz, B. I. and Pollard, H. M.: Pharmacological Evaluation of BL700B. J. Lab. & Clin. Med. *47*: 950-959, June, 1956.
3) Rosen, H., Blumenthal, A., Nead, M. H., Tislow, R. and Seifter, J.: Gastric Juice Studies in Rats. Federation Proc. *16*: 331, March, 1957.

Female Genital Tuberculosis

James Roderick Morgan, M.D., *El Paso*

Pelvic infections by acid-fast organisms occur much more frequently than is generally appreciated. (Chart #1) Many cases are discovered at infertility clinics where routine endometrial biopsies are done.

Clinical Features and Symptoms:

The organs involved in genital tuberculosis are:

Fallopian Tubes: 90 per cent

Uterus (endometritis) — (secondary spread from tube): 50 per cent

Ovaries: 25 per cent

Cervix, Vagina and Vulva: Rare.

Symptoms include infertility, abdominal pain, and heavy or irregular bleeding.

A. **Infertility:** Although a few pregnancies have occurred in patients with genital tuberculosis, sterility is the rule and no successful pregnancy has been recorded after a definite diagnosis of genital tuberculosis has been made. Ectopic pregnancy and abortions are common with pelvic tuberculosis.

B. **Abdominal Pain:** While this usually takes the form of chronic lower abdominal discomfort, this symptom is not prominent in early cases: therefore, those patients who have this symptom may be regarded as having a more advanced disease. Severe and acute pain is usually associated with pyrexia and with a mixed infection of coliform and acid-fast organisms. Such acute attacks commonly follow uterine curettage or a tubal patency test.

C. **Menstrual Aberrations:** The menstrual periods are normal in about one-half the patients: in about 40 per cent of the cases there is menometrorrhagia; 10 per cent manifest oligomenorrhea or amenorrhea. Dysmenorrhea is not a feature of the disease.

Poor general condition is an infrequent finding; undue fatigue and lassitude, loss of weight and appetite, and low-grade fever are noted in only about five per cent of the cases.

Chart No. 1
Incidence of Female Genital Tuberculosis

	No. of Patients	No. of Genital TBs
Jedbury (1950)	1,168	2.1
O'Brien & Lawlen (1947)	898	1.9
Halbrecht (1946)	820	5.5
Shannon (1952)	3,255	5.3
Hayne: (1952)	200	4.0

Diagnosis of Genital Tuberculosis.

There are no clinical features that will establish the diagnosis and frequently no physical signs to aid the physician. The pelvis may appear perfectly normal on physical examination. In some of the more advanced cases, hard masses, which are not tender, may be felt behind the uterus. Peritoneal irritation is shown by tenderness, resistance to palpation, "doughy" abdomen, or ascites.

There are, however, certain clinical clues which are helpful in diagnosis, as follows:

1. Family history of tuberculosis.
2. Past medical history of tuberculosis.
3. Presence of tuberculosis outside the pelvis.
4. History of pelvic disease.

Laboratory aids: 1. X-ray. Since pelvic tuberculosis is almost always secondary to disease elsewhere, and since the lung is the commonest primary site, the patient should be examined radiologically for evidence of a pulmonary lesion.

In 1945, Magnusson described the radiographic appearance of tuberculous salpingitis as seen in X-ray: "The isthmus of the tube is rigid with a smooth outline and gives the picture of a lead

pipe, terminating in the form of a dilated bulb where it joins the ampulla. Calcification in the tube is sometimes seen. Coexistent endometritis can be diagnosed, if it is far advanced, by the irregular saw-toothed outline of the uterine cavity."

2. **Histological and Bacteriological:** Two methods of bacteriological examination are available: culture and animal inoculation.

Staining the smears of the endometrium or of vaginal discharge gives poor results because of the few bacilli that are usually present. Cultures of the endometrium, vaginal secretion, or menstrual blood can be made on suitable media (Dorset egg or Lowenstein-Jenson). Because fresh tubercles are formed during the growth of the endometrium at each cycle, the endometrial biopsy should be made in the week preceding the onset of the menstrual period. Cultures are examined weekly up to two months. For animal inoculations a small piece of endometrium is placed in the thigh muscle of a guinea pig through a small incision. The animal is killed six weeks later and smears are taken from the regional and lumbar lymph nodes and the spleen.

Whether isolated by culture or by animal inoculation, the organism is typed as to human or bovine strain, and sensitivity to antibiotic drugs is determined.

Treatment

As most, if not all, patients have active pulmonary disease, treatment for such disease should take precedence over treatment for the pelvic disease. Methods of treatment include:

1. Sanatorium Treatment
2. Chemotherapy
3. Surgery
   a. Conservative
   b. Radical
4. Irradiation

1. **Sanatorium Treatment:** Adequate mental and physical rest, together with proper nourishment, improves the general health of the patient. Few cases of pelvic tuberculosis are cured with this treatment alone.

2. **Chemotherapy:** Whether drug and sanatorium treatment will finally arrest the disease has not been established. It has been shown, however, that this treatment makes patients safer for conservative surgery rendering radical surgery less necessary. Investigations and follow-up of cases are being done now and early reports indicate that chemotherapy will give long term cures without surgery.

Chart No. 2

Results of Chemotherapy in Tuberculosis Endometritis up to Three Years After Treatment. (Millar—1954), (Streptomycin and PAS)

Length of time after treatment	No. of cases	Endometrium Positive	Endometrium Negative	Per cent Negative
1 year	36	5	31	86
2 years	32	3	29	90.6
3 years	19	2	17	89.5

There is no standard formula for chemotherapy, but usually the patient is given 1 gm. daily of streptomycin (calcium chloride complex IM) for 84 days and 3 gm. para-aminosalicylic acid (PAS) (sodium salt) q.i.d. orally for 84 days.

Similar results are reported using various combinations of streptomycin, PAS (para-aminosalicylic acid), and INAH (Isonicotinic acid hydrazide), but the best combination of these have yet to be worked out.

3. **Surgical Treatment:** Prior to chemotherapy, genital tuberculosis was either left untreated or radical surgery was done; incomplete removal of the affected organs was (and still is) likely to result in the development of fistula (usually fecal fistulas).

Indications for Hysterectomy and Bilateral Salpingo-oophorectomy:

(1) Postmenopausal patient with troublesome symptoms.
(2) If adnexal masses appear to be increased in size during conservative treatment.
(3) If there are fistula which fail to heal (incision of tract and resection of affected section of bowel).
(4) Endometrium which is positive after medical treatment.

Hysterectomy in the younger female is more liberally indicated as successful pregnancy associated with this disease is extremely rare.

4. **Irradiation:** Pelvic X-ray treatment in small doses used to be given, but this form of treatment has been abandoned.

Bibliography: Furnished by author on request.

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this hypertensive patient prefers Singoserp... and so does his physician

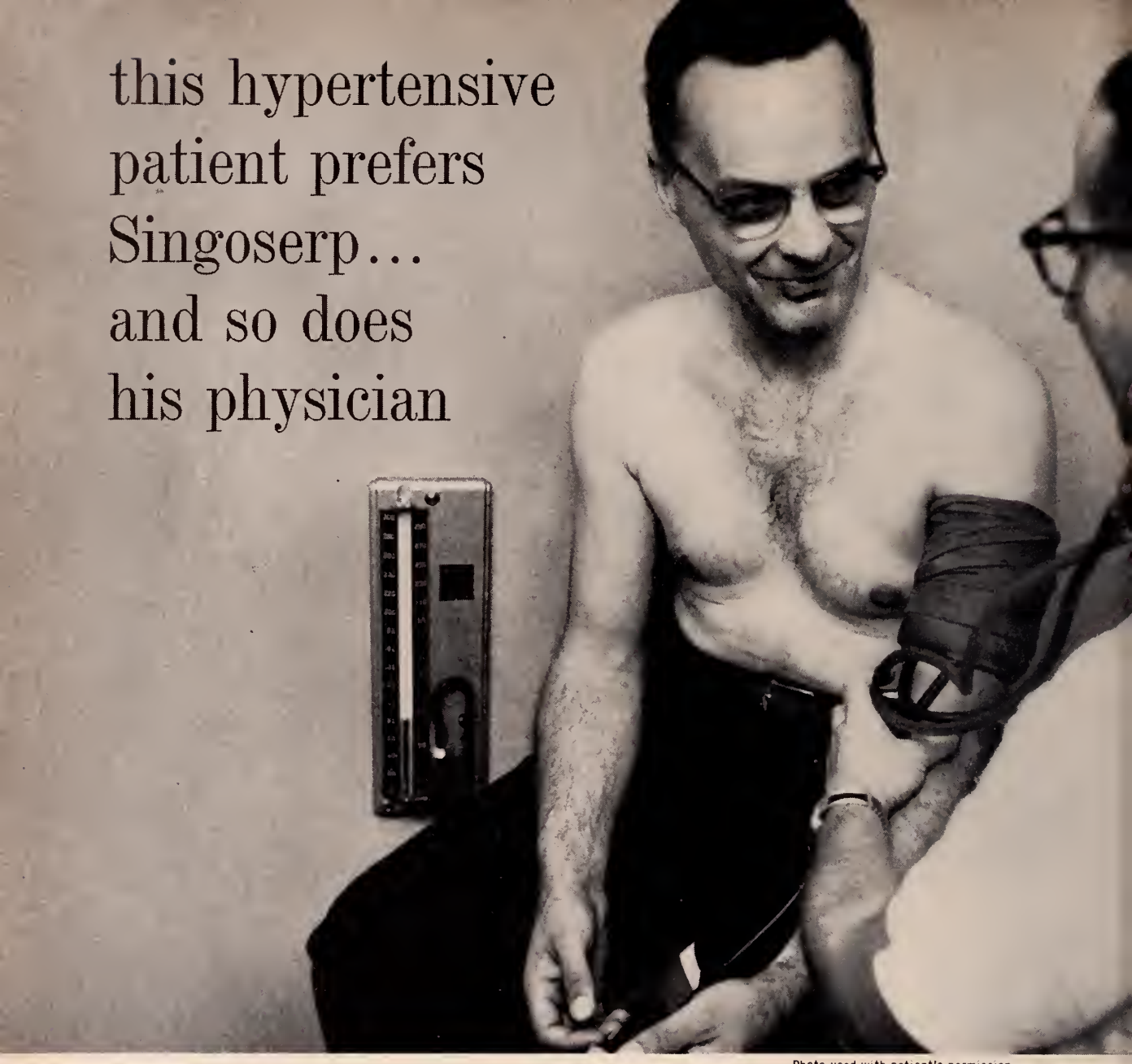


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Patient's comment: "The other drug [whole root rauwolfia] made me feel lazy. I just didn't feel in the mood to make my calls. My nose used to get stuffed up, too. This new pill [Singoserp] doesn't give me any trouble at all."

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Clinical Pathological Conference

R. E. Thomason General Hospital, El Paso

Case No. 1472, August 18, 1960

F. P. Bornstein, M.D., *Editor*

Presentation of case by C. M. Stanfill, M.D.

History: Dr. Nathan Kleban:

Confusion and fever provoked admission of a 59-year-old married Anglo-American woman to the hospital June 24, 1960.

Obstruction to nose breathing was not relieved by removal of a polyp in May, 1954. A granular, slightly friable mass in the posterior nasal space was visible through both nostrils when the patient was re-admitted to a hospital in December, 1955. There was also a small polyp in the region of the left middle turbinate. Pathological diagnosis of tissue removed was nasal polyp and epidermoid carcinoma. Decision to treat the tumor by excision only was reached after pathological consultation with Walter Reed Army Hospital and opinion that the growth was not of an invasive type.

Tumor tissue was again removed in June, 1956. Pathological diagnoses were intraepithelial carcinoma; squamous cell carcinoma, invasive, bone tissues with invasive tumor.

Psychotic illnesses were treated with electroconvulsive therapy in October, 1956, August and December, 1957, and May, 1958.

Pathological Diagnosis

Pathological diagnosis of tissue removed in February, 1958, was epidermoid carcinoma associated with carcinoma in situ. In July, 1958, tissue removed from the region of the sphenoid sinus was called papillary carcinoma.

Seropurulent nasal drainage was seen in March, 1959, when the patient was treated for an agitated depressive reaction following the death of her dog. Sinus and skull x-ray films were negative.

The patient went to the M. D. Anderson Hospital and Tumor Institute of the University of Texas at Houston on September 8, 1959, for evaluation and treatment after receiving Cobalt therapy at some time subsequent to her last surgery. Nasal polyps were seen to fill the left nasal cavity. Surgery done on October 16, 1959, consisted of partial resection of left maxilla with curettement of maxillary, sphenoid and ethmoid sinuses, plus cauterization. Papillary-like tumor tissue filled the left maxillary antrum. There seemed to be extension of tumor tissue into the left sphenoid sinuses. Pathological diagnosis was squamous cell carcinoma, invasive, arising in association with epithelial papilloma.

Irradiation

From November 3 until December 9, 1959, the patient received irradiation with tumor dose of 5000 r to a single left lateral 8 cm Betatron port. Granulation tissue thought to represent residual tumor on the posterior pterygoid and pharyngeal wall areas extending to involve the surgical margin and soft and hard palate was seen at the beginning but not at the end of the treatment period. Radiation reaction was relatively mild. A pressure ulcer of the soft palate corresponded to the posterior margin of the prosthesis on the left.

On February 10, 1960, at the M. D. Anderson Head and Neck Clinic the patient was considered

free of disease, although crusting was present. She had not used the prescribed nasal irrigating kit or the oil pack at night.

Complaint of headache, given a diagnosis of post-operative neuralgia, hospitalized the patient in March, 1960. She failed to keep a return appointment at the Anderson Clinic on June 8.

The patient had had one pregnancy and had one child. Her uterus had been removed in 1924 at the age of 24.

Family history was not pertinent.

Physical Examination:

T. 102 (R); P. 70; R. 20; B.P. 130/84.

The patient was confused, disoriented, noisy, incontinent of urine, refused to eat, moaned. Odor of breath was fetid. A palate prosthesis was in place. She was unable or unwilling to stand. No other abnormal findings were described.

Hospital Course:

Tetracycline 100 mg. was given 3 times I.M. on the first day. For the next 3 days she was given 500 mg. of tetracycline orally t.i.d. Temperature was normal by the second day. The patient improved to some extent, began to eat, got out of bed, talked, but remained confused, voided in bed. She was given vitamins, protein supplement and a tranquilizer. On July 2 an anti-convulsant drug was started and the tranquilizer stopped. The nose was irrigated with salt water.

Temperature rose to 102 (R) on July 14. She became restless, apprehensive, hypotensive, vomited, complained of pain in the lumbar region. Tetracycline 100 mg. was given q.i.d. starting July 15. Stupor and tremors of the trunk were noted on July 16. Rigidity alternated with more severe tremors of neck and body. There were no lateralizing neurological findings.

Spinal paracentesis was done on July 19. Pressure was not recorded. Fluid was turbid. Parenteral chloramphenicol (Chloromycetin) was prescribed. Temperature climbed to 104 (R). Breathing became labored. Stupor changed to coma. The patient died July 23, 1960.

Laboratory Findings:

Blood Counts: 6-24-60 — Hb. 12.4 gms., Ht. 44%, WBC, 10,800, Juveniles 1, Stabs. 6, Segs. 77, Lymphs. 15. **7-11-60** — Hb. 12.9 gms., Ht. 42%, WBC 12,300, Stabs. 11, Segs. 66, Lymphs. 23. **7-14-60** — Hb. 11.7 gms., Ht. 36%, WBC 19.200, RBC 3.95, Juveniles 1, Stabs. 13, Segs. 63, Lymphs. 23. **7-20-60** — Hb. 11.5 gms., RBC 3.68.

Urinalyses: 6-27-60 — Amber, turbid, alkaline, S.G. 1.007, Albumin 1 +, Sugar negative, WBC 4-5, few round ep. cells, amorphous and triple phos. crystals. **7-14-60** — Amber, cloudy, acid, S.G. 1.020, Albumin 1 +, sugar negative, lt. amorph. sed., WBC 0-1, RBC 16-18, ep. cells 2-3, occ. granular casts, bacteria light (rods). **7-15-60** — Amber, turbid, alkaline, S.G. 1.006, Albumin 2+ sugar negative, WBC 1-2, RBC 0 — few squamous ep. cells, amorphous and triple phos. crystals.

Chemistry: 7-5-60 — Chlorides (as Na Cl) — 108 mEq/L; Potassium—3-1 mEq/L; Sodium—142 mEq/L. **7-15-60** — Calcium—4.5 mEq/L (Normal 4.5-5.5 mEq/L).

Serum magnesium: 7-6-60 — 1.3 mg.%.

Blood Culture and stain for bacteria: 7-19-60 — Gram stain, no bacteria seen. Culture, no growth.

Spinal fluid: 7-19-60 — WBC 277, Polys 263, Lymphs. 14, Sugar 50 mg.%. Total protein 245 mg.%, Globulin 4+, no bacteria seen on smear, no A.F.B. seen, many WBC seen, culture showed proteum rettgeri.

Serology: 6-27-60 — Negative.

Dr. Bornstein:

If you read the protocol you will see that there was considerable discussion about this case with the Walter Reed Hospital Armed Institute of Pathology. In connection with this the whole problem of non-invasive carcinoma had to be considered. With this in view, I have reviewed all the slides we have on this patient. The first biopsy in 1954 shows a marked pseudo-epitheliomatous hyperplasia with some cellular irregularities. A year later the cellular anaplasia has become more outspoken but no real invasion was demonstrable during the life time of the patient.

Clinical Discussion — Dr. C. M. Stanfill:

These carcinomas of the nose and naso-pharynx are not uncommon. I imagine in this neighbor-

hood we will find about 20 to 30 every year. For people and this is really important, who examine noses, it is of importance to know what to do with the so-called polyp. I don't think anyone can look at a polyp and tell whether it is going to be benign or malignant. Anybody who has ever removed a great number of polyps and thinks he has removed a benign one, will occasionally be surprised by a report of malignancy.

Many people treat the so-called allergic polyps with cortisone and it would be good if everybody would have a careful look so that one does not treat a malignant case with cortisone. Now this lady apparently had a nasal polyp. It was biopsied and was benign. Three years later from the protocol she apparently had a biopsy from the nasopharynx which are reported as cancer in situ. It is a well known fact that many of these nasopharyngeal cancers can be less than the size of an eraser head and still they can produce bilateral neck nodes and spread all over.

Potential Carcinoma

I think that this woman should have been treated vigorously even with a diagnosis of only potential carcinoma. The further course of this thing is apparently typical. She apparently died of an extension through the sphenoid ridge and either developed a fatal brain abscess or meningitis. Apparently she developed a naso-pharyngeal cancer which spread into her ethmoid sinuses, and antra.

The surgical and medical treatment of these naso-pharyngeal cancers, is almost totally hopeless. Maybe five to ten per cent are being salvaged, most of them with Cobalt and deep x-ray therapy. If you have a naso-pharyngeal cancer on the lateral wall, then you would be justified in doing a neck resection provided you were sure that you could eradicate the primary lesion, but most of them and this is a peculiar feature of the malignancies of the naso-pharynx that the lymphocytes will permit immediate bilateral spread.

I can't see that there would be much point in doing a bilateral neck dissection, because there ususally is spread into the ethmoids and into the sphenoid ridge. The malignant tumors of the nasopharynx have a proportion of 2 cases of carcinoma to 1 of sarcoma.

Transitional Cell Type

The fairly common carcinoma is your transitional cell type which is the so-called Schmincke tumor. The Schmincke tumor, I guess, has become more famous through the fact that Babe Ruth had one. The tumor metastasized early to his neck nodes and to his brain.

There is another important point if anybody is going to make a diagnosis of nose and throat pathology, they should always examine the nasopharynx. This is done easily with naso-pharyngeal mirror or with a nasopharyngoscope. I think if people are going to check a patient from the nose and throat standpoint, they ought to be sure that the nasopharynx is free of tumor. It is hard to see up there sometimes, but with a little practice most anybody can look up there and after you have looked at several and seen what is normal, you can tell that something is abnormal if you just look.

Dr. K. Zolfoghary:

I remember I have seen two cases of nasopharyngeal tumor and both of them started from the nose and then spread backward into the eye and outward into the base of the brain. Unfortunately I have seen enucleation of the eye in the hope of completely curing the patient, but often some of the tumor was left behind and we had to go in and remove an extensive tumor in the temporal region. This tumor was squamous cell in type and the patient had extensive Cobalt therapy. I think she died of meningitis with extending infection from the nasopharynx upwards. In the other case they did neck dissection but some part of the tumor remained. Again Cobalt therapy was used but still the tumor extended to the base of the brain, actually extending through the meninges and into the tentorium. At autopsy the tentorium was completely invaded by the tumor, of course the bone also was involved.

Dr. I. A. Budwig:

I just want to mention a little bit about the spinal fluid, and I was wondering if occasionally you can diagnose a tumor of the brain by spinal fluid, and it would be interesting if someone had looked at the slide, who was trained, at the smear on the spinal fluid, it is reported as 277 white blood cells. I am sure she had a secondary menin-

gitis due to invasion of the tumor, but it would have been interesting to see if there were any carcinoma cells in the spinal fluid. I have seen two children that were brain or spinal cord tumors, and were diagnosed from the spinal fluid.

Dr. Bornstein:

They probably had ependymomas.

Dr. H. M. Gibson:

I would like to raise the question of false positive biopsies. I raise this question because a friend of mine who lives in one of the neighboring towns was discharged from the armed forces as a hopeless, inoperable, far advanced carcinoma of the naso-pharynx. This was approximately in 1946. The patient is alive and completely well. The other is an in-law of mine that was also diagnosed in one of the institutions to the north of us and returned and was re-operated for an additional area and was told that it was out of control and yet as far as the nasopharynx is concerned, this is completely normal. Now we run into this problem of pseudopositive biopsies in the field of urology fairly often and I would like to ask the pathologist and Dr. Stanfill just what part of the possibility of a false positive biopsy might play in prognosticating some of these cases.

Dr. Bornstein:

Well, I can only speak for myself, I don't think that you have gotten a false positive from me yet?

Dr. H. M. Gibson:

No. I have not. Fred.

Dr. Bornstein:

I showed that first slide in the very beginning because it demonstrates the extremely difficult problem to evaluate these lesions. Certainly we all make mistakes, on the other hand there is a small group of really well proven histologically malignant tumors which have regressed spontaneously, you can't get away from it, they do exist. I would say that there is more soul searching involved in the nasopharyngeal tumors, of the squamous type. The so-called Schmincke tumors permit a clear cut diagnosis, but the borderline from pseudoepitheliomatous hyperplasia to active malignancy is an extremely difficult one, that is why I picked the cause and showed the pictures.

Clinical Diagnosis:

Tumor of nasopharynx.

Dr. Stanfill's Diagnosis:

Tumor of nasopharynx with intracranial metastases.

Dr. Bornstein's Diagnosis:

A. Carcinoma of the naso-pharynx with direct extension into the brain.

B. Secondary brain abscess and empyema of ventricles.



Figure I

Pathological Discussion:

The autopsy of this patient showed an aspira-



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tion bronchopneumonia and extreme emaciation. There was a large prosthesis covering the maxilla, when this prosthesis was removed there was a tremendous hole and an ulcerated lesion with necrotic tissue around it. The main lesion was in the brain. The brain was covered with thick pus.

Figure 1 shows the brain in a rather unconventional manner. I so to speak, sort of took off the roof of the ventricles to show the centricles as seen looking down on them from above. Both ventricles were filled with yellowish-green pus. We did not find any evidence of tumor in the brain, but meningitis and emphyema of the ventricles. On sectioning the brain transversely, I also found an abscess in the frontal lobe. As far as the tumor is concerned, I took a section from the necrotic material at the edge of the prosthesis (Fig. 2). If you remember the previous

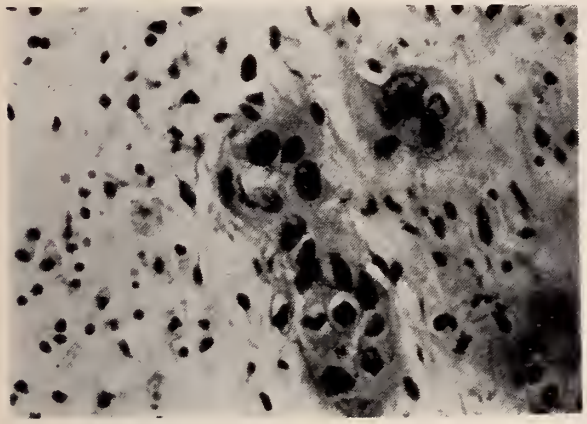


Figure II

slides, they showed a fairly well differentiated lesion, while on this slide one sees obviously malignant invasive primative clusters right at the edge of this granulation tissue.

Meningest Invaded

In addition the tumor had invaded the meningest which seems to be a fairly common occurrence in nasopharyngeal tumors. There is a special tendency to invade the ganglia and peripheral myelineated nerve at the base of the brain. In summary then, this is a case of carcinoma of the pharynx which lasted for about 6 years from the time the case was first operated and showed a non-invasive carcinoma. In the course of time the carcinoma became invasive and in spite of extensive surgery and radiation, penetrated to the brain where it caused an infection and brain abscess.

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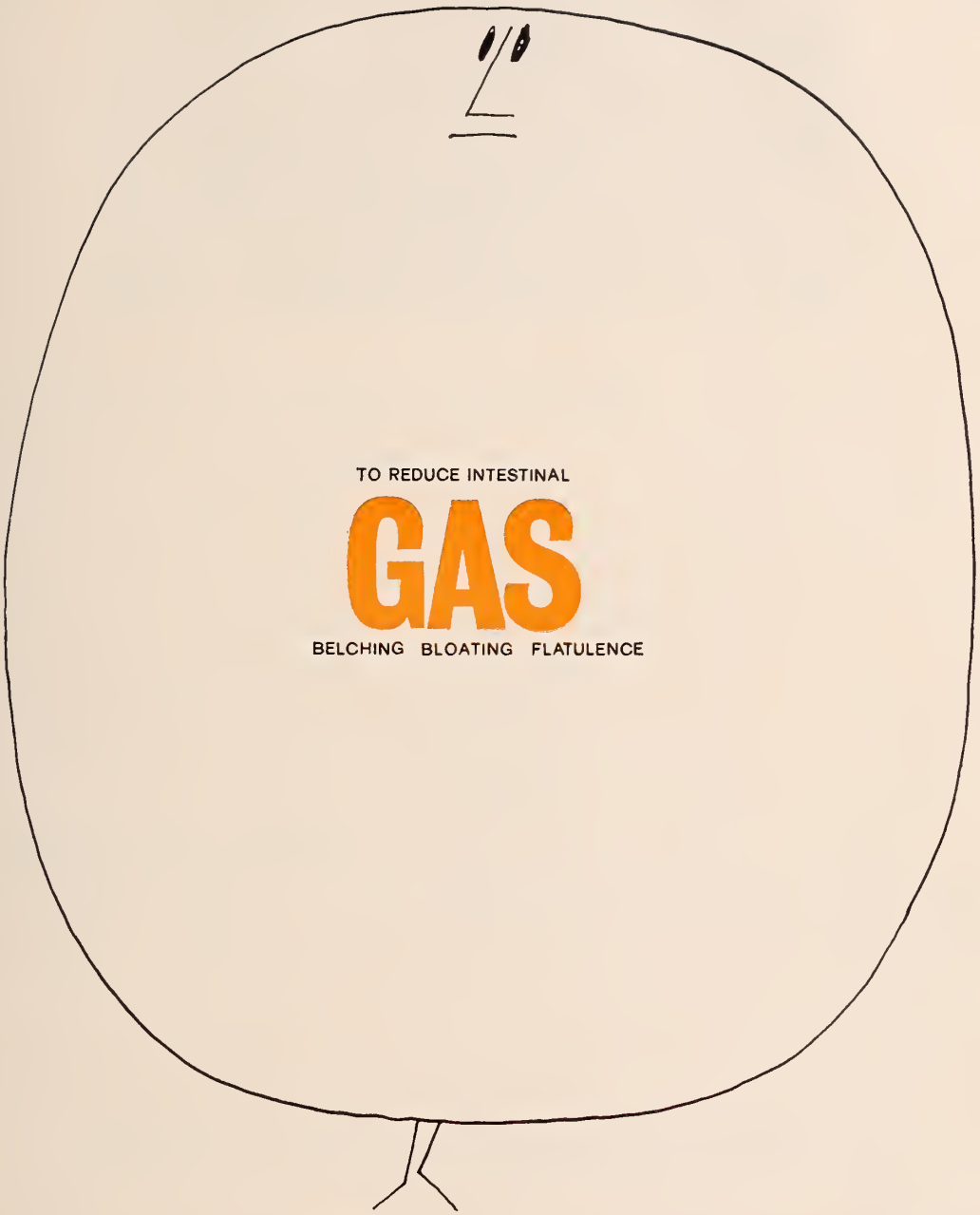
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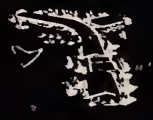
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1. Chapman, T.L., Expectant treatment of benign prostatic enlargement. **Lancet** 2:684, 1949.
2. Hinman, F., The obstructive prostate. **J.A.M.A.** 135:136, 1947.
3. Feinblatt, H.M., and Gant, J.C., Palliative treatment of benign prostatic hypertrophy. **J. Maine M.A.** 49:99, 1958.
4. Ibid. #3, **Southwestern Med.** 40:109, 1959.

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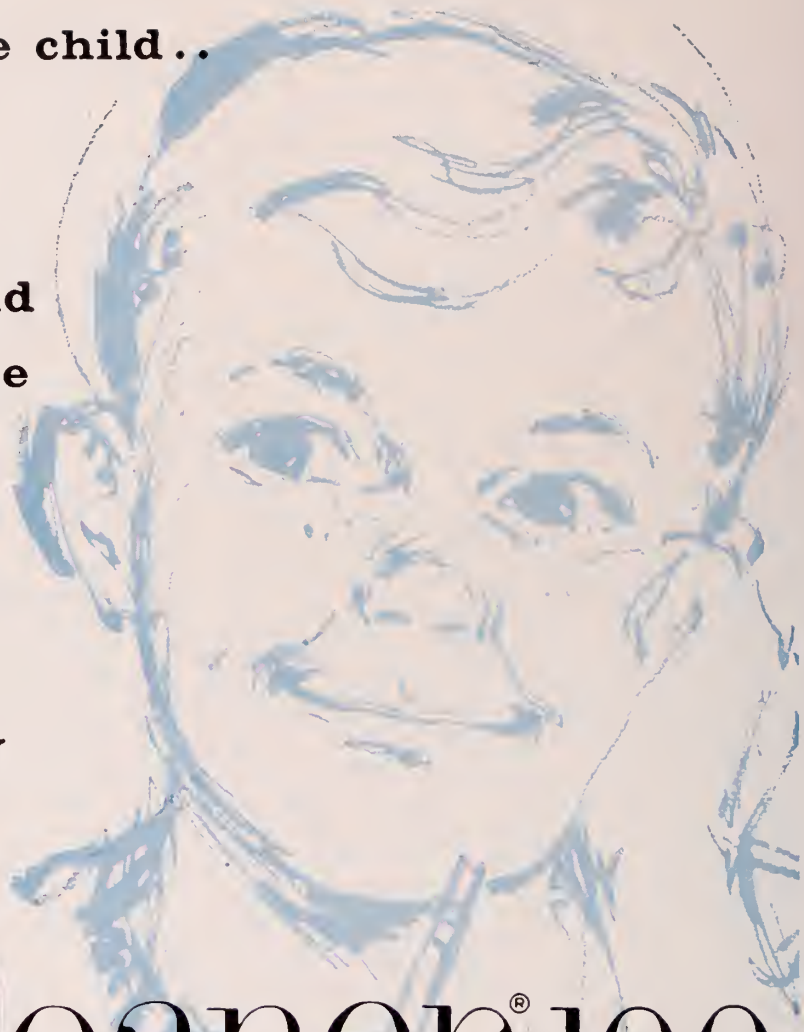


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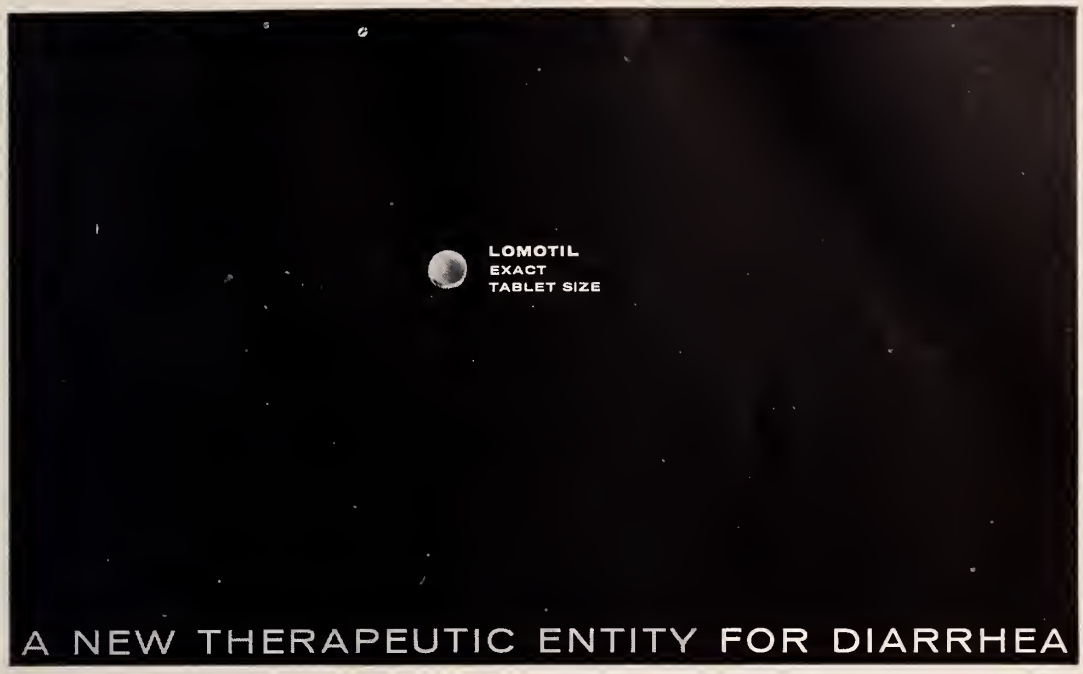
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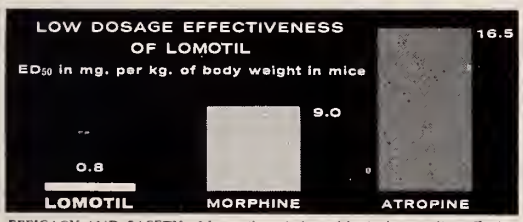
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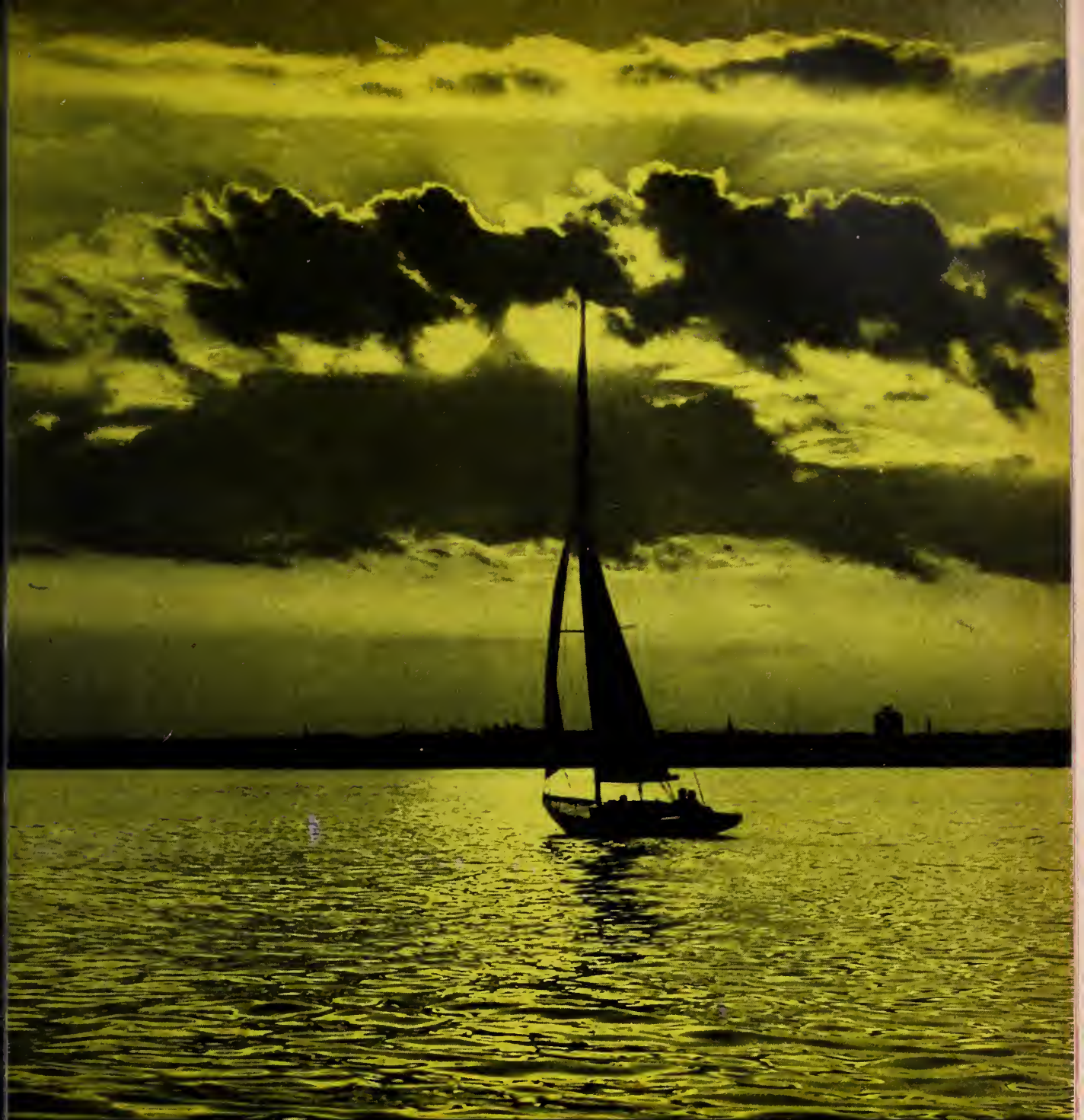
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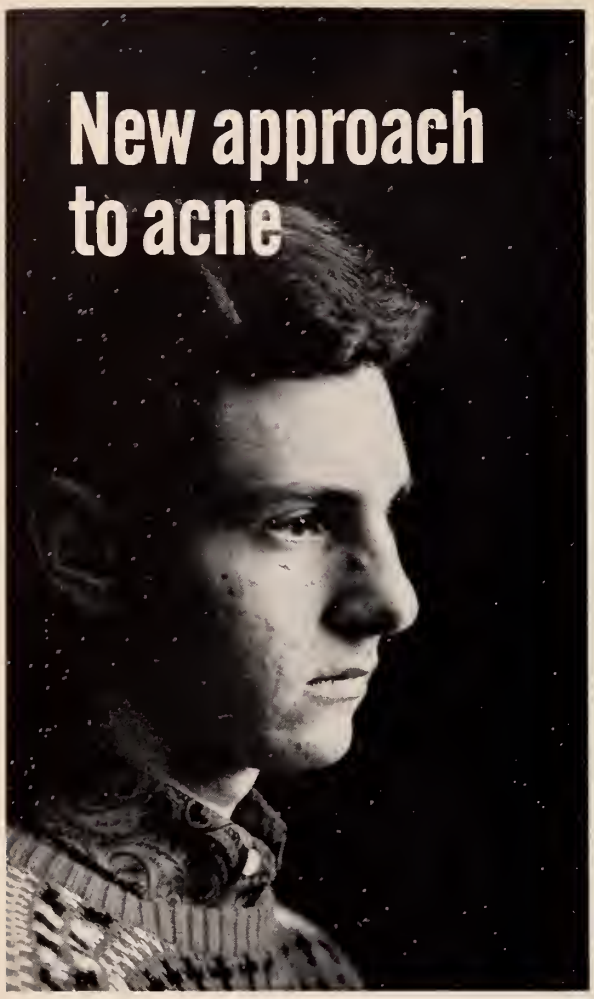


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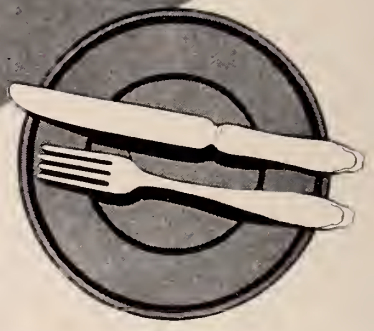
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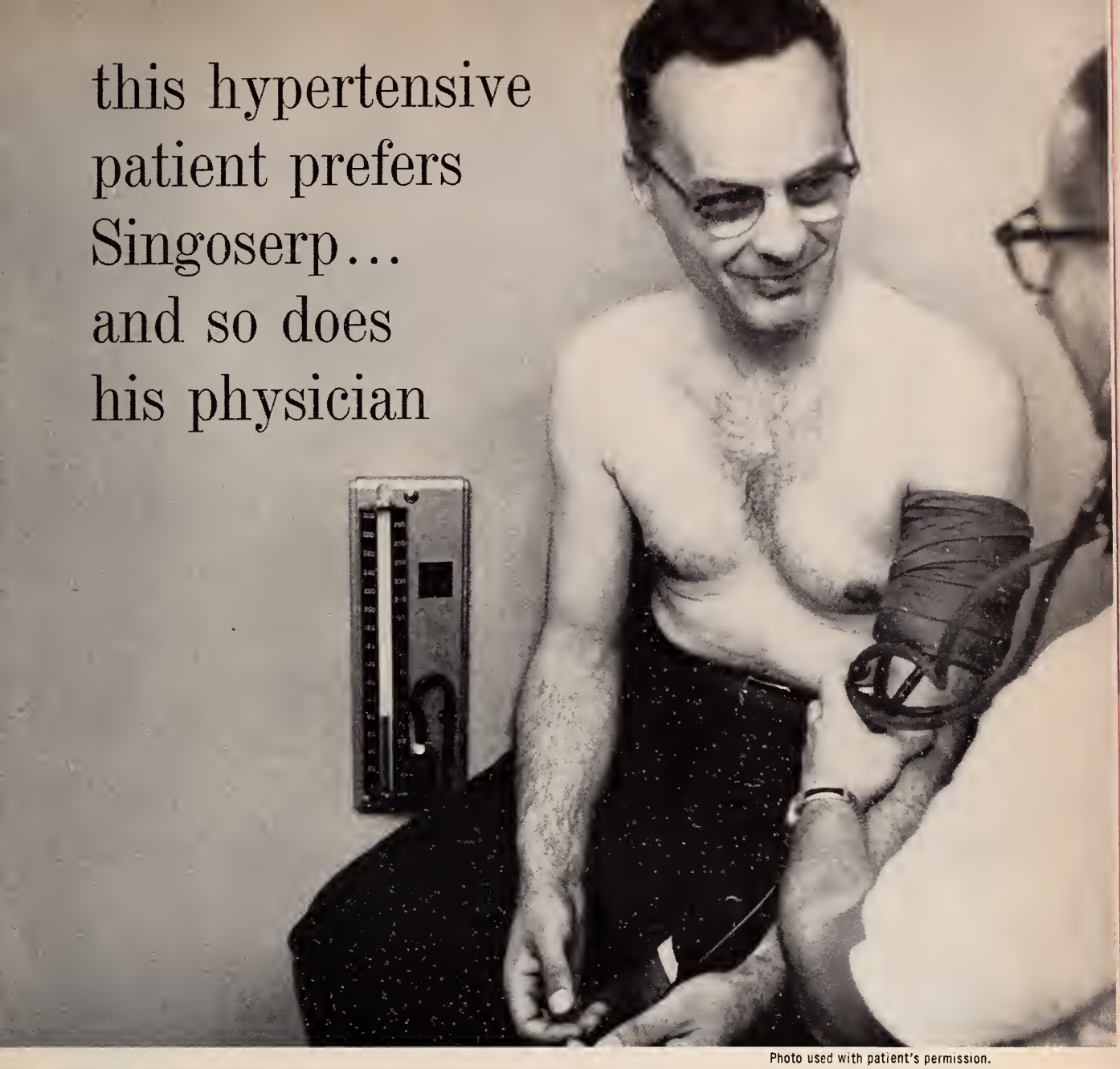


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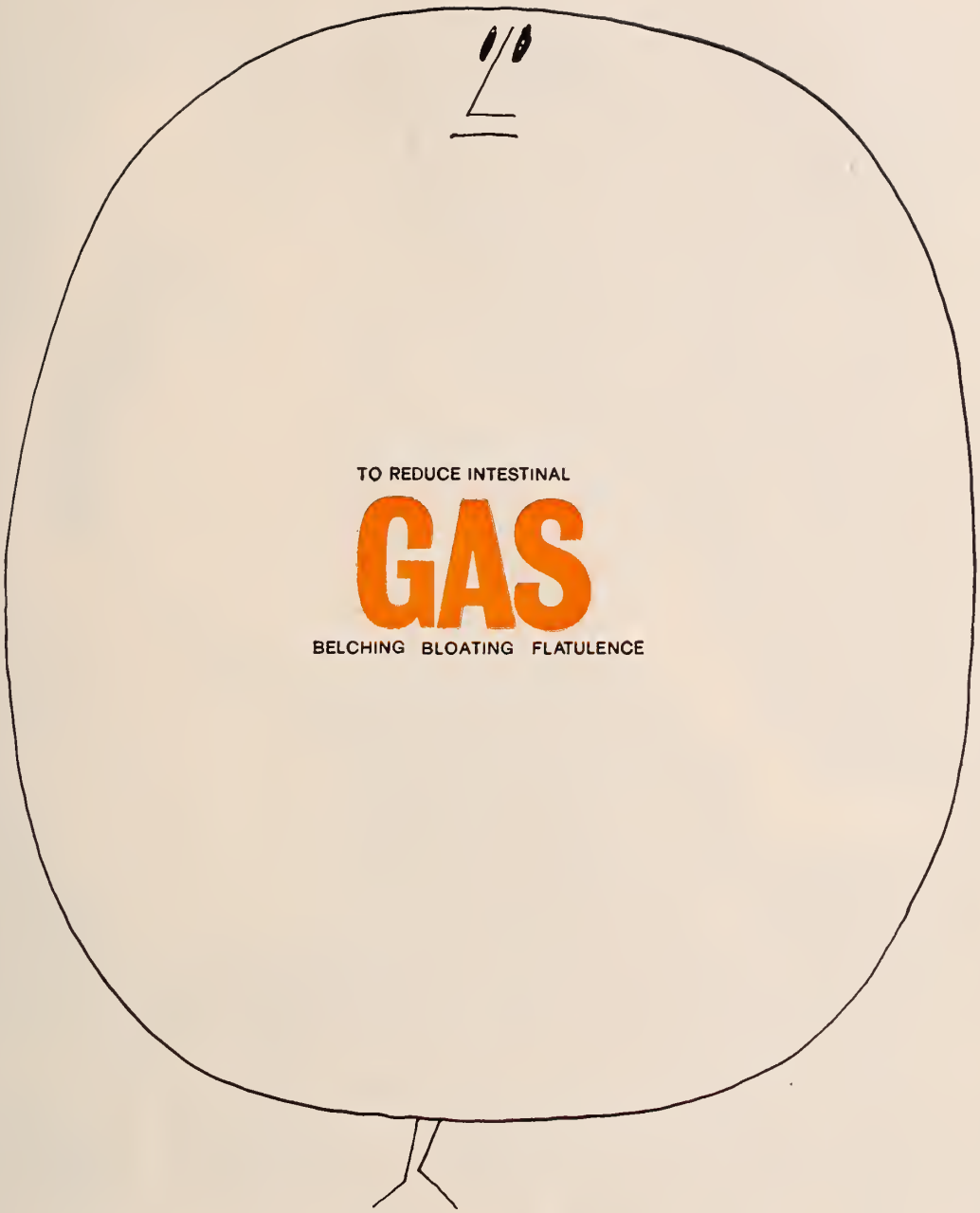


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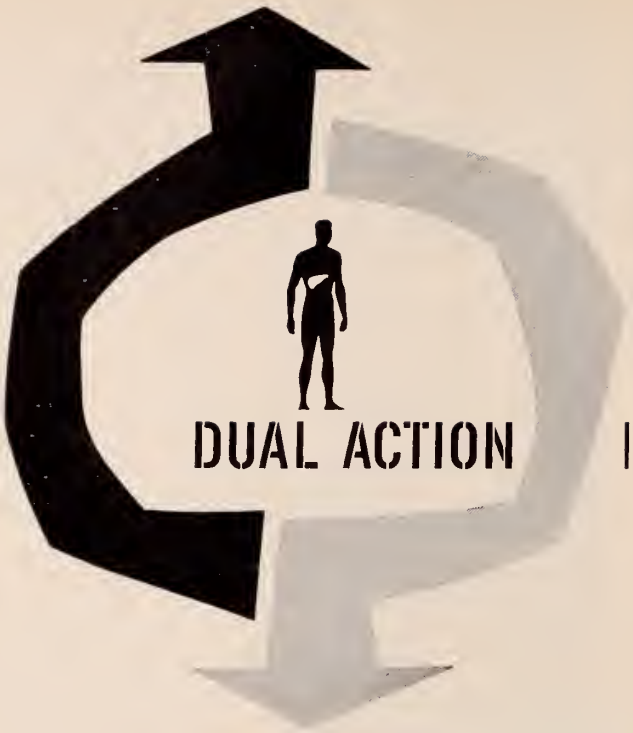
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1. Najarian, J. S., *et al.*: Am. J. Surg. *96*:172, 1958. 2. Wolfe, S. J., *et al.*: cited by Fast, B. B., Arch. Int. Med. *10*:467, 1958. 3. Editorial, New England J. M. *259*:1181, 1958. 4. Editorial, J.A.M.A. *169*:1076, 1959. 5. Britton, R. C.: Connecticut M. J. *22*:537, 1958.

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SOUTHWESTERN MEDICINE

VOL. XLI, NO. 11 NOVEMBER, 1960

Scoliosis

Early Diagnosis

By Herbert E. Hipps, M.D., *Waco, Texas*

You—the general practitioner, the family doctor, and the pediatrician—you can do more to prevent the severe, grotesque deformities from scoliosis than all the orthopedic surgeons in the world. This is true because you are the ones who see and can diagnose scoliosis in its incipiency.

Scoliosis is very much like many other deformities and many other diseases. If it is caught early, it can be "cured."

The orthopedic surgeon seldom sees scoliosis patients until they are in the nine to sixteen year old age group. At that time, as a rule, a considerable curve with rotation and fixation has developed. A **fixed deformity** is present, which seldom can be completely corrected.

If the orthopedic surgeon could see the child when the scoliosis is extremely mild, when it first begins, then the treatment program would be less hazardous, less expensive, less time-consuming, and the end-result would be immeasurably improved.

Possible to Recognize Early

It is possible to recognize scoliosis early, long before the curve becomes fixed and long before rotation sets in, and you, the family doctor, you are the one who is going to have to find it, simply because in the very early stage of scoliosis, the mother doesn't see anything wrong with the child's back, and you won't either, unless you keep in mind the possibility that such a condition might exist and know how to recognize it.

Look at Figure 1. Anyone can recognize that this seven year old child has scoliosis. Look at Figure 2, which is a standing a.p. x-ray through her spine. She has a severe degree of deformity with rotation of the vertebral bodies and fixation of them in this deformed position.

If this child's curve had been found and treated when she was two or three years old, before it progressed so far, a lot of this deformity could have been prevented.

I shall use this child's photographs to show you what to look for when you examine a child to see if scoliosis is present or not, simply because in this child scoliosis is far advanced and the points to look for are readily discernible.

First of all, have the child stand in front of you with the back exposed with weight equally distributed on both feet, just like the photograph in Fig. 1, (A) was made. Run your finger up and down the spinous processes, thus making a red mark on the skin; this will readily outline the curve for you. Note also that the left scapula is lower than the right one, that the left shoulder is lower than the right. Note that the left loin sinks in more than the right one. Note that the muscles on the right hand side of the shoulder, bridging between the shoulder and neck are more prominent than those on the left. Note also that the left iliac crest seems to be a little higher than the one on the right.

Have the child lean to the left and then to the right. You will notice that the child's thoracic spine bends to the left normally, but it appears to be stiff when she leans to the right. The reason for this is that when she leans to the left, she leans **with** the concavity of the curve. She leans the same way the curve does, but when she leans to the right, she leans **against** the curve and the



Figure 1

(A) This is an advanced degree of curvature which is easy to see. It is concave to the left in the thoracic spine. Note these associated torso deformities, which are always present with a curvature of the spine: 1. Note that the left loin sinks in more than the right; 2. The left iliac crest appears to be higher than the right one; 3. The shoulder girdle tilts down on the left; 4. One scapula is higher than the other; 5. The muscles between the neck and the shoulder on the right are more prominent than those on the left.

(B) Leaning forward, weight equal on both feet, both knees straight, with her fingers nearly touching the floor. Note the bulging of the thorax on the right, caused by backward bulging angulation of the ribs, which is due to rotation of the vertebral bodies at the apex of the curve.

curve won't straighten, so her thoracic spine appears to be rather stiff.

Now have the child lean forward, and place the fingers of both hands near the floor as in Fig. 1. B. Be sure that she leans straight forward and that both knees are straight. In this patient's case, note the bulging mass on the right hand side in the thoracic area. This is evidence of a fixed rotation in the vertebral bodies.

The vertebral bodies that are in a curve always rotate in such a way that the spinous processes point toward the concavity of the curve. Thus the ribs on the concave side move forward, in front of, or anterior to their normal position, whereas the ribs on the convex side move backward or posterior to their normal position. In this child's case, as you will note, the ribs on the right hand side have moved backward and are forming this hump which you see. The same thing occurs in the lumbar spine when there is a curve there, but in the lumbar area, since no ribs are present, the hump or bulging area is not so large.

When this hump is present on one side of a spine, it practically always means that an advanced degree of curvature is present, that it is a fixed curve, that rotation has occurred, and that a fixed deformity is present.

Now let's look at Bobby M., age 8, Fig. 3. This child was brought to me because of his feet. I did examine his feet, of course, but I also found a very early scoliosis.

Let me show you how in examining this child, I suspected the presence of a scoliosis. You will find in this child almost exactly the same things as noted in the first case, although of a much less degree. Look at Fig. 3 (A). The child is standing naturally, with weight equal on both feet, no elevation under either foot and both knees straight. Notice the asymmetry of the loins, notice that his left shoulder is a little higher than the right, notice that the left scapula is higher than the right and the muscles between the neck and shoulder on the left are a little higher than those on the right. Fig. 3 (B) with the child facing you, note again the asymmetry of the loins. His right side, as you will note, seems to sink in more than the left side. Note the slight tilt of the shoulder girdle.

These things, **if consistently present** while the child is standing, may mean that a scoliosis is present. Certainly the presence of these physical findings should lead you to suspect that one is present.



Figure 2 (C. F.)

This x-ray was made with the child standing naturally, *weight equal on both feet, both knees straight, and no elevation under either shoe. Note the severe thoracic curve with rotation of the vertebral bodies.*

In this child's case, leaning forward revealed no rotational abnormality and right and left bending movements were normal.

Now look at Fig. 4 (A). Here is an x-ray of the child made lying down. As you will note the spine is perfectly straight, but look at Fig. 4 (B). **This x-ray was made with the child standing,** weight equal on both legs, both knees straight and no elevation under either shoe. Now you can see that a slight curve is present. After having seen the standing x-ray, you can understand therefore, why he has the tilted shoulder girdle, and why there is an asymmetry of the torso in the loins.

This child, therefore, has a beginning scoliosis. It is not yet a fixed curve and no rotation is present. Treatment for it at this stage is very simple indeed and the results are uniformly good.

In this particular child's case, I made recommendations in regard to his feet, which is why the child was brought to me, and I also made certain recommendation about treatment of the spine. These were never carried out because the child's father was in military service and they moved away within the next two weeks. It was ten years later before I saw the child again.

During this ten year period of time the child had no treatment for his back. Figure 5 shows you the degree of progression in his curve. It has become greater in degree, rotation has occurred, fixation has occurred, and this eighteen year old child now has a fixed deformity of a considerable degree. This curve can never be completely



(A) The child is standing with weight equal on both feet, knees straight, no elevation under either shoe. Note the asymmetry of the loins, the left scapule is higher than the right and the muscles between the shoulder and neck on the left are higher than those on the right.

(B) Note here that the right loin sinks in more than the left and that the right shoulder is lower than the left.

Figure 3 (B. M.)

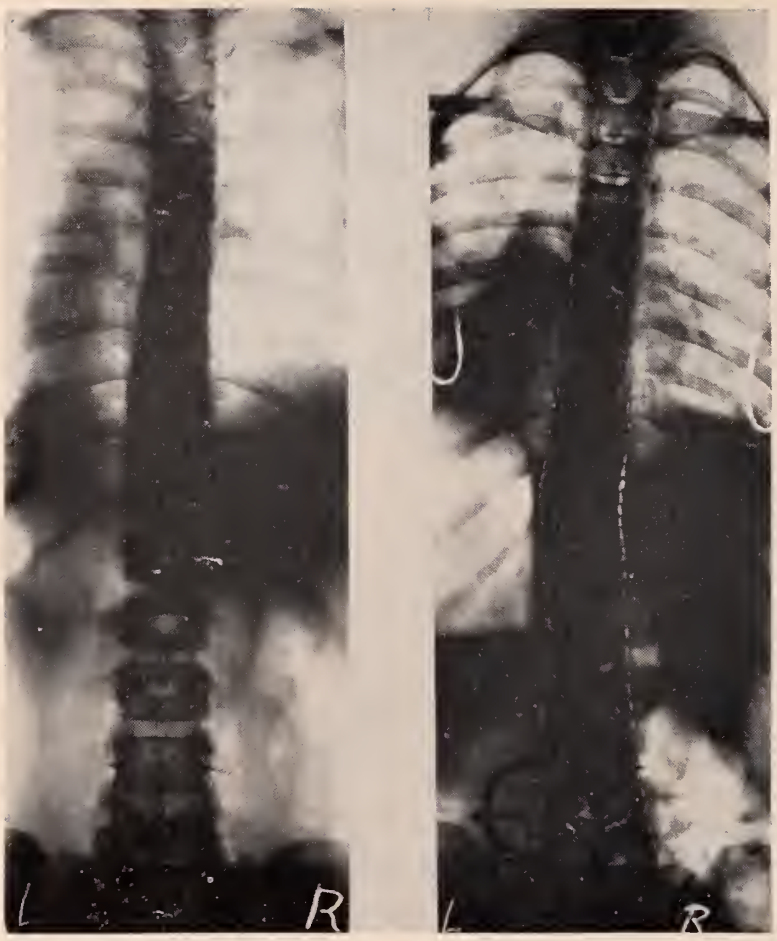


Figure 4 (B. M.)

(A) This film was made with the patient lying supine. The spine is perfectly straight in this supine position.

(B) This film was made with the child standing, weight equal on both feet, knees straight, and no elevation under either shoe. Note the slight curve concave to the right. The left scapula is higher than the right one. This is an early, an incipient curve, not yet fixed, and no rotation is present and it is visible, roentgenologically, only in the standing position.



Figure 5 (B. M.)

(A) A marked curve with considerable fixation is now present. Compare this back view with the back view of this same child ten years before, in Figure 3-A.

(B) Note the severe degree of rotation present in this fixed curve, as indicated by the backward bulging rib mass on the left.

straightened and this child will go through life with a crooked back and with a hump on his back and it will be weaker than a normal one. All of this could have been prevented had proper treatment been carried out in those early stages when the diagnosis was first made.

In review let's restate the things to look for:

1. Does one loin sink in more than the other? Fig. 6 (A). The loins should be symmetrical. Are they? **This is the most important early physical finding.**

2. Does one iliac crest seem to be higher than the other? It usually looks this way when the loins are asymmetrical.

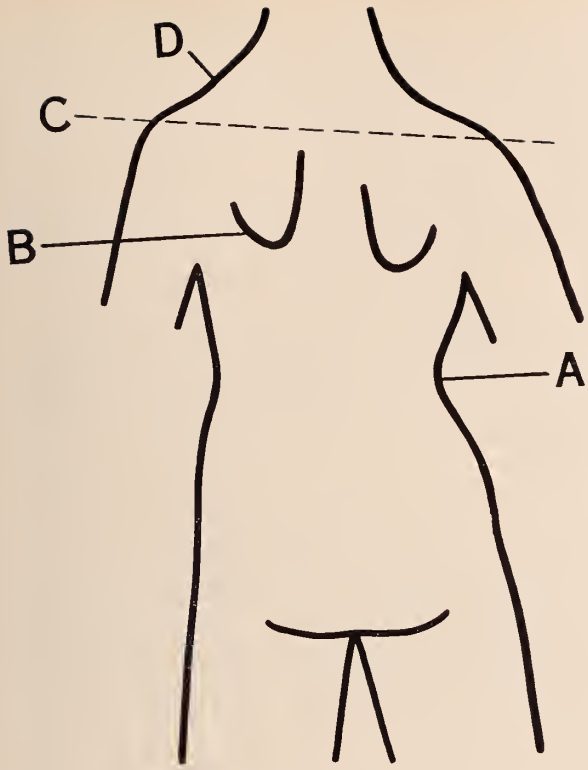


Figure 6

Diagrammatic line-drawing showing specific points to look for in the diagnosis of early scoliosis. As you will note, I have not drawn a line showing the spine curve, because often, very often indeed, in the early curvature you cannot see a curve when you look at the spine alone. The associated torso deformities though, do show up at an early stage, and the things to watch for in the early diagnosis of scoliosis therefore are: D—Prominent muscles between the shoulder and neck on one side. C—Tilted shoulder girdle. B—One scapula higher than the other. A—One loin sinks in more than the other. Also note that the iliac crest appears to be higher than the other because of the way the loin sinks in. The asymmetry of the loins is the most important single physical finding in the diagnosis of early scoliosis.

3. Are the scapulae at the same level or is one lower than the other? Fig. 6 (B).

4. Is the shoulder girdle straight across, parallel to the floor or is it tilted? Fig. 6 (C).

5. Are the muscles between the shoulder and neck more prominent on one side than the other? Fig. 6 (D).

6. Have the child lean forward to see if rotation is present.

7. Have the child lean straight sideways to the left, and then to the right. If motion is free in one direction and not in the other, this might mean a curve is present.

8. ALWAYS MAKE A STANDING X-RAY. Have the child stand naturally with weight equally distributed on both feet, no elevation under either foot and with both knees straight.

The two things that are most important of all in the diagnosis of early scoliosis therefore are:

1. The presence of assymetrical loins, Fig. 6 (A).

2. The presence of a curve on a standing x-ray.

One scapula being higher than the other might be due to Sprengel's deformity. The presence of thickened muscles bridging across between the shoulder and the neck on one side doesn't always mean a scoliosis. It might be due to a Klippel-Feil Syndrome or to torticollis, but these findings usually mean a scoliosis and if present, certainly should make you suspect that one does exist.

When any of these things is noted, especially the asymmetrical loins, then, by all means, have a standing x-ray made.

You have a double responsibility therefore to your patient insofar as scoliosis is concerned.

1. You must recognize it in its incipiency.

2. You must insist on the family taking the child to an orthopedic surgeon for treatment, because treatment at that early stage is a very simple matter, easy to accomplish, not expensive, and the results are extremely good.

By doing these two things you can save your patient a lifetime of disability.

1612 Columbus St.

Changes Seen in the Eye in Hypertension and Arteriosclerosis

C. H. Fredell, M.D. *Flagstaff, Arizona*

It was Tuerck who first observed the peculiar retinal changes in hypertension in 1850. In 1858 Heymann described the retina in patients ophthalmoscopically and caused considerable controversy.[5]

Wagener has considered the retinal changes and the degree of blood pressure elevation in judging the various types of hypertensive retinal changes as follows:

1. Increased blood pressure which is normal with rest and mild retinal arteriosclerosis.
2. Arteriosclerosis more severe with venous thrombosis and retinitis with permanently elevated blood pressure.
3. Severely elevated blood pressure with angiospasm and retinitis with no papillaedema.
4. Severely elevated blood pressure with angiospastic retinitis with papillaedema.
5. Normal fundus with elevated blood pressure.

The chief value of the Wagener classification is that it enables the physician to determine by means of funduscopic study the degree of progress of the hypertensive disease and its prognostic significance at that time.

The most frequent occurrence of arteriosclerosis is in the late stages of benign hypertension, where arteriolar changes in the kidney seem to be of greatest significance. Sclerosis first affects the vessels in the brain and then the retinal and choroidal vessels, the choroidal more acutely than the retinal.[14]

The first changes we are able to see by opthalmoscopic examination is the loss of the translucency which may be directly attributable to the changes in the vessel wall, particularly the media. There is slight narrowing of the blood column at various points, due to these changes, and thickening of the vessels, but it is not seen diffusely. These vary in caliber while other branches remain, for a long period of time, quite normal in size.[4]

The changes in the vessel walls are seen microscopically as a hyalin degeneration varying from small endothelial deposits to involvement of the entire wall. There is fatty infiltration of the intima or of the entire wall with an ultimate reduplication of the internal elastic lamina and fibrous thickening of the media, with an increased number of fibrils in the adventitia.[6]

The widening of the reflex stripe is due to the change of the reflecting surface from the surface of the arterial blood columns to the outer portion of the arteriole, which was very well described by Gans.[7]

Soon the light reflex is distinct and we are able to see depressions of the vein where it courses below the arteriole. The depression of the vein or "A-V nicking" has been explained by Friendenwald on the basis of having the vein and artery in the same connective tissue sheath at the crossing.[6] All of the layers of the artery are seen to be thickened microscopically, displacing the vein into the deeper layers of the retina.

Reduction in Caliber

The next noticeable change is a reduction in the caliber of the artery with a conspicuous light reflex stripe. There is marked venous compression at its arterial crossing and an enlargement of the proximal portion of the vein and artery. There have been reports of aneurysmal dilatations and irregularities.[1] At this stage many investigators have described the arteries as being "copper wire" in appearance which might be attributed to the thickened opaque media, with a narrowed red column of blood beneath it.

Chief of Surgery, Flagstaff Hospital

The sclerotic changes continue to complete obliteration of the lumen with a "silver wire" appearance of the vessels. The smaller arterioles are involved early. These vessels are ten to fifteen microns in diameter and are found most commonly near the macular and peripheral regions.[7] The vessels are wider than the blood column seen previously, hence a wider more visible light reflex of increased brillance is seen.[5]

In addition to a "silver wire" appearance of the vessels near the macular and distant peripheral regions there is an irregular tortuosity and fine localized variations in the caliber of the arterioles generally.

First Description

In 1916 Foster Moore gave the first good description of the variegated retinal picture due to arteriosclerosis. The vessel changes are essentially the same whether of senile, hypertensive, diabetic, or nephritic origin.[12]

Rarely are only vessel changes seen in an arteriosclerotic patient's fundus, particularly in the younger age groups.[8] The younger age groups are usually diabetic, where the arteriosclerosis is quite severe. The severity of sclerosis is related to the duration of the diabetes and the degree of the metabolic disorder. Changes in the retinal substance are seen in addition to the characteristic vessel changes.

There is a central punctate retinitis which enlarges and coalesces. Hemorrhages and exudates usually precede the white blotches which are evidence of retinal atrophy and scarring.

There is sclera visible in many areas. These hemorrhages and exudates are due to injury to finer arterioles and an altered capillary fragility in that particular region with extravasation of blood into the retinal substance. With more severe injury of the choroidal vessels, chorioretinosis is seen more often than a retinosis alone. With resolution of the hemorrhages there is proliferation of the pigmented epithelium near the atrophy.

The degenerative changes have been thought to be lipid and hyalin deposits. Many investigators[3] believe that the retinal changes are not the result of disturbed metabolism but due to the vessel changes per se.

In addition to the previously mentioned vessel changes, occasionally the retinopathy of nephritis affects the optic disc. In the retina we see hemorrhages, either superficial or deep in location. They usually vary in number, depending on the elevation of the blood pressure and the duration of the disease. They are round, irregularly shaped, linear or flame shaped.

The round and irregular hemorrhages seem to occur at the periphery of the fundus and the linear and flame shaped ones occur more centrally. Some of the hemorrhages are absorbed rapidly and completely while others are converted into white or yellow areas. The latter are sharply delineated and shiny, with little edema near them, while the former have a hazy outline with evidence of edema causing a "cotton-wool" appearance. The multiple small areas of change are the most commonly found.

Histologically one finds most of the hemorrhages in the nerve fiber layer although the more peripheral lesions are deeper. Cholesterol and lipoid disintegration products of the nervous elements form white spots which are more punctate peripherally.

When the hemorrhage is reabsorbed, cyst-like spaces persist and are filled with hyalin colloidal substance which appears yellow and shiny.[6] Absence of retinal tissue over the choroid is also seen.

In the very late stages of arteriosclerosis with retinopathy one finds a stellate shaped group of white spots radiating from the macula. The reason for this configuration is not known and histological studies have been non-contributory.[14]

Loss of Vision

One of the serious complications of arteriosclerosis with hypertension is thrombosis of the central retinal artery. The event is usually heralded by painless, sudden and complete loss of vision in one eye. Ophthalmoscopic examination reveals a marked pallor of the fundus, except for the macular region which is cherry red in color. This is due to the fact that the retina is thinnest at this point so that the red of the underlying choroid is seen.

The nerve is pale, the vein normal or slightly decreased in size and the artery very small with little blood in it. Some signs of retinal edema are seen by the radial reflex lines about the macula. In a certain number of cases a cilio-

retinal artery from the circle of Zinn supplies the macular region. In such cases a small area of central vision is fairly well preserved.

Often the retinal artery occlusion lasts only a few hours as a complete one soon becomes incomplete and a certain amount of function is restored. The color of the retina slowly returns to normal but the disc remains atrophic.

The artery and the vein are in close proximity behind the lamina cribosa. They are included in a common sheath of tissue. Thickening of the arterial wall may be accompanied by a closure of the vein. Closure of the retinal vein also occurs at its "A-V" crossing with sclerotic retinal arteries.

On fundiscopic examination there is seen an intense congestion with enlarged and tortuous veins. Interruptions of the course of the vein at the crossings with the arteries produces a sausage-like segmentation as well as numerous blotchy hemorrhages. Hemorrhages into the vitreous may also occur. The arteries appear to be normal with some edema seen in the central retina. Vision is gradually lost over a longer period of time to a point of blindness. When there is an incomplete closure of the vein the prognosis is good. There is then a gradual remission of the picture.[8]

Transitory Blindness

Transitory blindness has been reported as secondary to arterial spasms of the brain. It may be sudden or gradual in onset and be of a few hours to a few days duration. In conjunction with this vasospastic arteriosclerotic cerebral amaurosis, we always see arteriosclerotic retinopathy.[5]

As the angiospastic changes progress, one can see contractions in most of the retinal arteries and some irregularity in their caliber. This reduction and irregularity becomes more marked with a higher blood pressure prolonged over any period of time. When complete spasm occurs, there are mere threads seen where vessels formerly were seen.[2, 4]

The vessels show little loss of transparency of their walls and the reflex stripe is not exaggerated. In the earlier phases of angiospasm there is seldom any venous compression at the arterial crossings.

An uncommon accompaniment of angiospasm is sclerosis of the vessels although spasm in the sclerotic vessels is a commonly observed phenomenon.[14] When sclerosis does occur there is a much graver prognosis for the patient. The angiospasm is a disease of young adults and arteriosclerosis is a disease of older age.

When sclerosis does occur, the retinal changes are much more numerous when there are angiospastic episodes. The exact onset of sclerosis in retinal vessels is unknown. Changes in the vessels have been observed ten days after the angiospastic onset.[16]

In the severe, "malignant," vessel spasm one sees retinal edema with occasional detachment of the retina, cotton-wool patches, hemorrhages, ganglioform swellings of the nerve fibers, and deposits of hyalin and lipid. There is an occassionally seen star-shaped figure in the macular region, and occasionally papillaedema occurs. Often there is increased intracranial pressure.[10] These changes are most frequently found in hypertension with sclerotic changes of the vessels.

Toxemias of Pregnancy

Acute angiospastic retinitis is commonly seen in glomerulonephritis in toxemias of pregnancy, and in lead poisoning.[5, 13, 15] The picture of acute angiospastic retinitis varies greatly. There are no sclerotic vessel changes. The retinitis per se is due to acute decompensation of the retinal circulation secondary to occlusion due to severe spasm.

The prominent changes in the retina are edema, hemorrhages, exudates and "cotton-wool" patches. If it persists longer than usual, the hyalin and lipid deposits are seen as well as the star-shaped figure in the macular region. Retinal detachment may occur when the edema accumulates in one area.

In most cases, after acute spasm resolves,[29] whether due to termination of the pregnancy, the remission of the nephritis, or the treatment of the lead poisoning, the recovery of the retinal integrity is complete. In the severe malignant hypertensive toxemias of pregnancy, arteriolar necrosis has been reported with residual scarring.[10]

Perhaps one of the most frequently written about phases of the hypertension problem in relation to eye changes is the one of diffuse arteriolar constriction with or without neuroretino-

pathy. It is seen, as is the angiospastic retinopathy, most commonly in the malignant essential hypertension, glomerulonephritis, and hypertensive toxemias of pregnancy. The greatest difference between the two is the involvement of the optic disc or the papilla.

The disc is edematous, reddened and sursounded by retinal swelling. The appearance of the disc is attributable to the contraction of the arterioles with secondary edema and venous hyperemia. In glomerulonephritis the retinal changes usually precede the disc changes.[9] If retinal lesions progress, the papillaedema may improve and atrophy will supervene.[15]

Recession of papillaedema has been observed in few cases of malignant essential hypertension in terminal phases where the cranial pressure was elevated and removal of fluid did not affect the encephalopathy. It was thought that some compensatory mechanism was present in the peripheral vascular supply to the retina where a few normal arterioles absorbed the edema and improved the retinitis.[11]

The retina usually has a gray cloudiness near the papilla due to the edema and ganglioform swellings of the nerve fibers. The gray areas are seen to progress to a white color with evidence of "cotton-wool" patches. The whitish spots progress to bright and shiny or yellowish opague, irregular plaques occasionally surrounded by hemorrhages of varying size.

Several white areas are also seen near large vessels which do not involve the macular region. A "stellate figure" is seen near the fovea. Flame shaped hemorrhages are seen parallel to the vessels and perivascularly. Peripherally they are round and there is a pigment epithelium proligeration.

Pathologically we find a serofibrinous exudate in the papilla and neighboring retina. The spaces between the tissue are filled with fluid and hemorrhages which are seen over the nerve fiber layer. The white spots are large cells laden with fat, lipid and cholesterol esters. Between the retinal elements there is edema with fatty changes of the glial fibers of the nerves and numerous perivascular leukocytes.

The pigmented epithelium has proliferated and the arterioles show hyalinization, fatty changes, necrosis, endothelial proliferation and medial alterations. Acute necrosis of vessel wall results in hyalinization and lipoidosis in precapillary arterioles and even in capillaries or larger vessels.

There is greater obstruction of the vessels in the choroid with lesions of leukocytic infiltration, fibrinous exudation and arteriolar thickening.[6, 16]

We are faced with the necessity of recognizing the malignant phase of "hypertension with neuroretinopathy" since it assumes such great prognostic significance. Subjective optic symptoms of malignant hypertension are color scotomata, especially to blue with high degree of ambliopia, and other symptoms of impaired vision.[5]

The most frequent optic complications of malignant hypertension are the detachment of the retina, closure of the retinal artery or vein, secondary glaucoma, and complete blindness due to encephalopathy.

Summary:

A detailed description of the funduscopic findings one encounters in hypertension and arteriosclerosis has been presented.

It is very important to examine the fundus oculi in all patients suspected of having hypertension and those who have hypertension of any degree. The examination is a very valuable way to follow the progress of the disease and response to therapy. It is hoped this presentation will help the reader obtain a clearer understanding of the changes that are seen, if looked for, in the fundus in hypertension and arteriosclerosis.

References

1. Bailliart, Schiff, Werthhiemer, Juvanon, Am. Jour. Ophth. pp. 24, 239. Feb. 1941.
2. Clay, G.E.M. Baird, Am. Jour. Ophth. pp. 21, 1396, Dec., 1944.
3. Elder, Duke. Sir W. S. Text of Ophth. Vol. 1, 2, 3, C. V. Mosby Co. 1942.
4. Elwyn, H. Arch. of Ophth., pp. 31, 376, 1944.
5. Fishberg, Hypertension and Nephritis, Lea & Febiger, Phila. 1937.
6. Friendenwald & Friendenwald, Bull. John Hopkins Hosp., pp. 45, 332, 1929.
7. Gans., J. A. Amer. Jour. of Ophth. pp. 27, 1020, 1944.
8. Gifford, R. A. Textbook of Ophthomology, W. B. Saunders, 1952.
9. Graham, Arch. of Ophth. pp. 26, 464. Sept. 1941.
10. Hallum, Trans. Am. Ophth. Soc. XLIII, 1945.
11. Kieth, Rucker, Arch. of Ophth. pp. 26, 240, Aug. 1941.
12. Moore, Foster, Quart. Jour. Med. 10, 29, 1916.
13. Sellinger, E. Am. Jour. Ophth. pp. 20, 56, Jan. 1937.
14. Von der Heydt, Am. Jour. Ophth. pp. 24, 325, Mar. 1941.
15. Wagener, Penn, M. J. pp. 705, June, 1937.
16. Wagener, Trans. Am. Ophth. Soc. 25, 349, 1927.



ORTHOPAEDIC MEET HELD AT BEAUMONT — At a meeting of the New Mexico Chapter of the Western Orthopaedic Association held at William Beaumont General Hospital in El Paso September 17 are, left to right, Dr. W. Compere Basom, El Paso, Beaumont consultant; Dr. Jean Cauchoix of Paris, France, guest speaker; Dr. Robert Forbes, Albuquerque, retiring president of the chapter; and Col. John J. Brennan, chief of Beaumont's Orthopedic Service, new president of the chapter. (Official U. S. Army photograph.)

French Surgeon Speaks

To New Mexico Orthopaedists

Dr. Jean Cauchoix, assistant professor of orthopaedic surgery at the University of Paris and author of several books and articles in the orthopaedic field, was the principal speaker at a meeting of the New Mexico Chapter of the Western Orthopaedic Association September 17 at William Beaumont General Hospital.

Dr. Cauchoix discussed fractures and non-unions and reported on cases of non-unions in which iliac bone grafts were combined with firm fixation.

Captain T. B. Horan, M.C., presented a paper on "Surgical Treatment of Malignant Skeletal Tumors". A 25 per cent overall survival rate was reported. Early diagnosis and biopsy were recommended. Amputation provided the best chance for survival, Captain Horan said.

Captain Manfred E. Krause, M.C., spoke on "Congenital Chronic Dislocating Radii of Elbows", a rare condition of which only 36 cases have been reported in medical literature. Captain Horan, in his talk on "Traumatic Dislocation of the Hip", urged that seat belts be worn to prevent such injuries, which are caused by knees striking the dashboard with femurs being driven out through the back of the hip, posterior aspect of the acetabulum.

Captain Krause, in his paper on "Experiences with Chemical Stimulation of Fracture Healing", reported that anti-tuberculosis medications appear to aid fracture healing, according to a preliminary research report at William Beaumont General Hospital.

Clinical Observations on Iron Metabolism in Pregnancy

By Celso C. Stapp, M.D., *El Paso*

Although the development of anemia during pregnancy may be due to several causes, the great majority of those related directly to the pregnancy itself are of the iron-deficiency type.

Because the female with normal blood values is better prepared to withstand hemorrhage at delivery or other obstetric complications and because she is better prepared to provide normal quantities of iron to the fetus, the maintenance of proper blood values during pregnancy has long been of medical interest.

Our concepts of iron metabolism during pregnancy have, however, undergone a great deal of change since the development of newer and better methods of study. It is now recognized that the maintenance and building of reserve storage iron during pregnancy is at least as important as the mere maintenance of the hemoglobin level. Furthermore, the old idea that levels of 10 gms./100 cc. of hemoglobin represent only a "normal" blood dilution during the last trimester of pregnancy is no longer tenable.

Iron-Deficient State

Instead, it seems well established that the fall in serum iron and the increase in erythrocyte protoporphyrin values in pregnant women whose hemoglobin levels fall below 12 gms./100 cc. certainly indicate an iron-deficient state.

New concepts, therefore, place much more emphasis upon the desirability of maintaining and improving the pregnant female's hemoglobin status throughout pregnancy rather than to begin the administration of therapeutic iron when hemoglobin levels have fallen to an arbitrary subnormal point.

Recognition of the fact that the average female is in a precarious state of iron balance and seldom has any significant amount of reserve iron regardless of her hemoglobin level,[1] places even greater importance upon assuring sufficient iron income throughout pregnancy to supply the demand of the developing fetus. Only in this way can hemoglobin levels be maintained, reserve storage iron be protected and the appearance of anemia avoided.

Iron Metabolism in Pregnancy

If we assume that the average woman has 12 gms./100 cc. of hemoglobin and a blood volume of 4,000 cc. at beginning pregnancy, her total hemoglobin mass is 480 gms. This represents about 1,600 mg. of elemental iron. Since she probably possesses little or no reserve storage iron, it is necessary that she supply the needs of the fetus entirely through increased dietary absorption and by the iron conserved through cessation of menstruation.

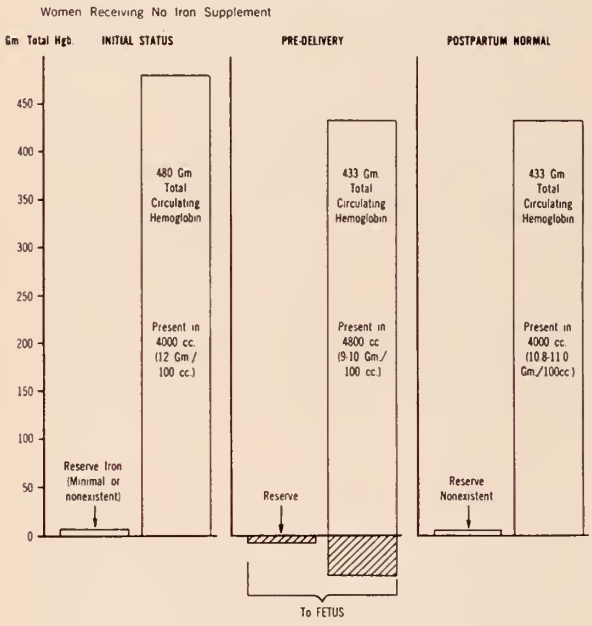
The fetus requires 440 mg. or more of elemental iron. Assuming a normal excretion of one mg. of iron per day, even though the normal rate of absorption doubles to two mg. per day, the diet would add only 280 mg. of iron during the 280-day pregnancy. As a result, 160 mg. of iron would be removed from the blood through the destruction of hemoglobin and eventually appear in the fetus as fetal hemoglobin iron.

This 160 mg. of iron represents the destruction of about 47 gms. of hemoglobin, leaving the woman with a net total of 433 gms. in her normal

blood volume of 4,000 cc. (10.8 gms./100 cc.). This, therefore, would approximate the eventual postpartum hemoglobin level. In the last trimester, when blood dilution may approximate 20 per cent, the same total hemoglobin would be present in about 4,800 cc. of blood to give an apparent value of about nine gms./100 cc. These changes are illustrated in Figure 1 and would occur to a greater or less extent depending upon the actual iron storage reserve present at beginning pregnancy.

Figure 1

Effect of Pregnancy on Hemoglobin and Storage Reserve Iron
(NO THERAPEUTIC IRON SUPPLEMENT)



The body does not put iron into the storage depots until the need for circulating hemoglobin is satisfied. Normal hemoglobin values, therefore, do not in themselves guarantee the existence of any iron reserve. On the other hand, low values almost certainly suggest the practical absence of reserve storage iron.

In other words, the female is likely to show a decrease in hemoglobin during pregnancy regardless of the initial level. The extent and the time of appearance of this fall are dependent upon the time of disappearance of whatever iron reserve is present at the beginning of pregnancy.

Practical Aspects

The above theoretical concepts are subject, of course, to individual variation. That most women, however, do not have sufficient reserve storage iron to supply the demand of the fetus is evidenced by the fact that 80 per cent of pregnant women fail to maintain their hemoglobin during pregnancy. In fact, evidence of iron deficiency appears in most cases when the hemoglobin levels fall below 12 gms./100 cc.[2]

The response to the administration of therapeutic iron during pregnancy is additional evidence for the presence of the iron-deficiency state since, in these circumstances, four of five pregnant women do maintain or improve their hemoglobin.[2]

It is obvious that provision of adequate therapeutic iron to permit the patient to complete the pregnancy without loss of hemoglobin must be a primary therapeutic consideration. Furthermore, even though the patient would have been capable of completing her pregnancy without suffering hemoglobin decreases, the iron deficit due to pregnancy is certain to leave her less well prepared, in terms of iron reserve, for subsequent menstrual blood loss or subsequent pregnancies.

Therapeutic

For these reasons it is entirely rational to administer therapeutic iron to all pregnant patients. Such a practice can, in most instances, prevent a precipitous fall in hemoglobin levels and the development of a severe anemia even in women with little or no reserve storage iron. It may also provide a postpartum iron reserve as protection against subsequent iron deficiency.

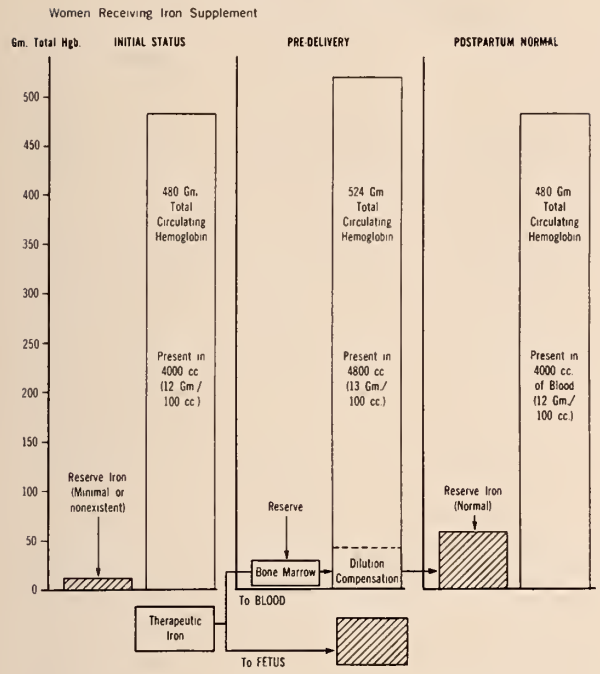
The value of routine therapeutic iron during pregnancy is illustrated in Figure 2. Therapeutic iron serves both to supply the demand of the fetus and to provide new iron for bone marrow synthesis of the hemoglobin needed to compensate for blood dilution. As a result, total circulating hemoglobin is temporarily increased up to the time of delivery. Shortly thereafter, circulating blood values return to normal and the excess circulating hemoglobin is converted to reserve storage iron. Thus, the postpartum woman is in a normal iron status.

Patient's Iron Status

It is obvious that blood values obtained approximately six to eight weeks postpartum will give evidence of the patient's iron status. Other factors

Figure 11

Effect of Pregnancy on Hemoglobin and Storage Reserve Iron
(THERAPEUTIC IRON SUPPLEMENT)



being equal, a postpartum hemoglobin level below the initial finding would indicate a continuing chronic iron deficiency state without sufficient iron to permit normal circulating hemoglobin and a virtual absence of reserve iron. On the other hand, postpartum values above the initial values would suggest that the patient had entered pregnancy in an iron-deficient state and had absorbed and utilized additional iron during her pregnancy.

In either case, postpartum iron administration should certainly seem rational. The only assurance that reserve iron existed after completion of the pregnancy would be a series of findings in which pre-delivery values were above those initially found and postpartum values had returned to the initial levels since. This would indicate, of course, that the increased circulating hemoglobin of the last trimester had been returned to storage reserve.

Accordingly, it has been our practice to prescribe a hematinic to all pregnant women beginning either in the first or early second trimester of pregnancy. In addition, we recommend the continued administration of iron for several months postpartum.

Administration of Iron

In our experience, the various inorganic iron compounds appear to be equally efficacious when administered orally. There is certainly little merit to the "shotgun" preparations and this is particularly true of the administration of iron with vitamin B_{12} or other hematinic adjuncts in preventing the ordinary hypochromic anemia of pregnancy. A great many thorough studies have demonstrated that the absorption and utilization of ferrous iron depends primarily upon physiologic factors and not upon the form in which it is administered.

However, the discovery of erythropoietin, the erythropoietic hormone, and identification of its role as the regulator of erythropoiesis[3] may require modification of this concept. The fact that cobalt enhances the formation of erythropoietin in the body led us to evaluate the effect of an iron-cobalt product* as a hematinic agent in pregnant women. Such preparations have previously been evaluated in pregnancy with excellent results in dosage levels providing 600 to 800 mg. of ferrous sulfate per day.[4] In the present study, however, the cobalt was given with only 300 mg. of the iron salt daily. If the increased marrow iron utilization, due to cobalt-enhanced erythropoietin, in turn increased gastro-intestinal absorption as might be expected, then these smaller quantities of iron should prove fully effective. A resulting advantage should be a decrease in the gastro-intestinal intolerance frequently present with the customary required iron dosage. This may be a much more important factor than is often realized since in careful studies intolerance to customary doses of ferrous sulfate has been reported to be as high as 50% of all patients.

Materials and Methods

We have given the cobalt-iron mixture to well over 1,000 pregnant women during the past three years with what we believe to be excellent results. Lack of time prevents preparation and correlation of the resulting mass of statistics but we felt it would be of interest to present data compiled from a series of 40 consecutive cases representative of the over-all group. These are not selected

*The preparation used in this evaluation was Roncovite-MF, Lloyd Brothers, Inc., Cincinnati, Ohio.

cases. They are simply a series of patients seen in the course of practice and should be typical of those seen in the average obstetrical practice in this area.

Fifteen of the group were given the cobalt-iron preparation beginning in their first trimester of pregnancy; 21 began this treatment during the second trimester; four received it only in the three months prior to delivery. The series represented 14 primigravidas. There had been 15 prior recorded abortions or miscarriages divided among nine patients of the group. The dosage prescribed was one tablet three times a day representing 45 mg. of cobalt chloride and 300 mg. of ferrous sulfate.

Hemoglobin Values

Hemoglobin values were determined spectrophotometrically and erythrocyte counts by standard methods by a commercial laboratory except that the first postpartum results were obtained in the hospital laboratory. None of the patients in this series showed evidence of a megaloblastic anemia and, based on the hemoglobin and red cell counts, all were either normochromic or hypochromic. These data represent, of course, the usual accuracy to be expected in daily practice.

Hemoglobin values and erythrocyte counts were done at the time of the initial visit and were repeated two or three times during the pregnancy. Because these values fluctuate widely and are invalid[2] during the last two weeks of pregnancy, we attempted to obtain pre-delivery blood data near to but prior to this time. The average "pre-delivery" data in this series of patients was obtained 6.1 weeks before delivery. First postpartum values were determined on the third postpartum day and "final postpartum values" were determined when the patient was discharged, at the last office visit, usually four to six weeks later.

Results

The average erythrocyte count, the average hemoglobin level and the distribution of individual hemoglobin values for the 15 patients who received the iron-cobalt preparation beginning with the first trimester of pregnancy are shown in Table I. Fourteen of these 15 women maintained or improved their hemoglobin status during pregnancy. Ten of the 15 showed pre-delivery values of 13 gms./100 cc. or better. On the final postpartum count, no patient had less than 12 gms./100 cc. hemoglobin and 14 of the 15 in this series showed values of 13 gms./100 cc. or more.

Table I.

Blood Values of Patients Beginning Treatment in First Trimester

Hemoglobin Gms./100 cc.	No. of Patients at Each Level			
	Initial Hgb	Pre-delivery Hgb	First Post-partum Hgb	Final Post-partum Hgb
9.0- 9.9	1			
10.0-10.9	3			
11.0-11.9	6	2	2	
12.0-12.9	5	3	1	1
13.0-13.9		4	5	8
14.0-14.9		6	6	6
15.0-15.9			1	
Average Hgb Gms./100 cc.	11.2	13.2	13.4	13.6
Average RBC Count in Millions	3.6	4.0		4.2

Similar data for the 21 patients who received the iron-cobalt preparation beginning early in the second trimester appear in Table II. In this group,

Table II.

Blood Values of Patients Beginning Treatment in Second Trimester*

Hemoglobin Gms./100 cc.	No. of Patients at Each Level			
	Initial Hgb	Pre-delivery Hgb	First Post-partum Hgb	Final Post-partum Hgb**
9.0- 9.9		1		
10.0-10.9	4	1		
11.0-11.9	8		1	
12.0-12.9	4	3	2	2
13.0-13.9	2	9	9	7
14.0-14.9	2	6	7	7
15.0-15.9	1	1	2	4
Average Hgb Gms./100 cc.	11.6	13.2	13.5	13.9
Average RBC Count in Millions	3.6	3.8		4.2

*Average was fourth month of pregnancy.
**One patient did not appear for final hemoglobin determination.

19 maintained or improved their hemoglobin and 16 of the 21 gave pre-delivery values of 13 gms./100 cc. or more. On the final postpartum count, none were below 12 gms./100 cc. and 18 of the 21 were at the 13 gms./100 cc. level or above.

The four patients in whom treatment was not begun until the seventh or eighth month of pregnancy had an average initial hemoglobin of 11.5 gms., an average pre-delivery value of 13.4 gms. and an average final count of 13.3 gms. All four of these had maintained their hemoglobin throughout the second trimester without iron therapy. Shortly thereafter, however, one of these four patients showed a hemoglobin value of only 10 gms./100 cc.

Discussion

In our opinion, the maintenance of optimal hemoglobin levels during pregnancy is an important objective. As Eastman[8] says, ". . . Even the milder anemias are not without their clinical import, for they constitute the most common cause of malaise, weakness, easy fatigability, susceptibility to infection, shortness of breath, and tachycardia." Moreover, anemic patients often have more prolonged labors[9] and infants born of anemic mothers are frequently deficient in stores of iron.[10]

On the basis of accepted standards of 12 to 12½ gms./100 cc. hemoglobin and 4 to 4½ million red cells/cu. mm.,[5] our series of patients was "borderline" anemic at the time of first visit. Despite fetal demand for iron and the "dilution factor" involved in pregnancy, these women improved their hemoglobin and their red cell status quite strikingly during pregnancy. There did not appear to be any significant difference in the response whether therapy was begun in the first or early in the second trimester except that a relatively greater proportion of the group receiving early therapy delivered at levels above 13 gms.

Final Postpartum Values

It is of considerable interest to note that the final postpartum values show only a slight difference from the pre-delivery determinations and are definitely higher than the initial values. These findings certainly suggest that these women had reached their true "normal" at about 13.5 gms./100 cc. of hemoglobin, that they had done so through improved iron utilization despite the abnormal iron demand of pregnancy and that they had initially been much more anemic than previously accepted standards would indicate. Certainly they are better prepared to withstand future menstrual iron deficit and subsequent pregnancy than at the beginning of this treatment. The distribution of patients in Tables I and II shows clearly the effectiveness of therapy in improving the hemoglobin status of these patients.

Four patients who received no iron supplementation during the first two trimesters, completed their pregnancy with satisfactory blood values. This, however, should not be taken to mean that early supplementation is unnecessary since, of the group in whom therapy was not begun during the first trimester, several began to show a fall in hemoglobin values before medication was initiated. In three, the drop was severe (from the 14 to 15 gm. level down to approximately 10 gms./100 cc.).

Effect of Pregnancy

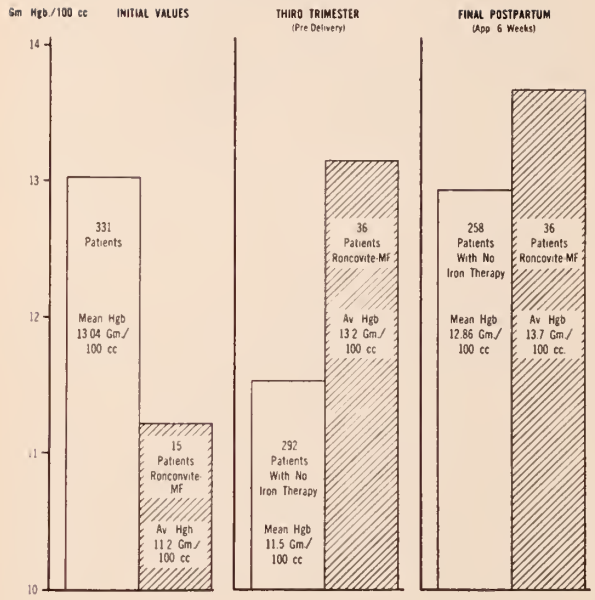
The effect of pregnancy on blood values has been thoroughly studied with and without iron supplementation. It is generally accepted that some 80 per cent of pregnant women fail to maintain their hemoglobin during pregnancy unless iron supplementation is given and that even with adequate doses of plain iron compound, one in five pregnant women still fail to maintain their hemoglobin levels[2,4]. In our series, 37 of 40 patients (92½ per cent) maintained or improved their blood status with the administration of the cobalt-iron preparation.

It is also interesting to compare our results with those of Darby, et al.[2] in their comprehensive studies of some 300 pregnant patients receiving no iron supplementation. In their series, mean hemoglobin and red cell values fell throughout pregnancy and final postpartum findings (six weeks or later) were slightly below the initial values. In our group, in contrast, mean values for these indices rose throughout pregnancy and the final postpartum findings were well above initial levels. Figure III shows a comparison of results obtained in the Darby study with those of the iron-cobalt preparation used in our evaluation.

Figure III

Comparison of Hemoglobin Values

Patients Receiving Cobalt-Iron Therapy and those Receiving No Iron Supplement



We would interpret this to mean that the "dilution factor" accounted for the decreased hemoglobin levels in the Darby study and that their postpartum findings showed simply a return to the pre-pregnancy "status quo." Our own findings would indicate an acceleration of iron utilization and hemoglobin synthesis with the patient's hemopoietic system more than compensating for the dilution factor so that the postpartum patient is in a better iron status than prior to her pregnancy. Clearly she must have absorbed and utilized more iron as a result of cobalt-iron therapy.

Toxicity and Side Effects

The allergic skin rash exhibited by some patients to cobalt administration, even in the form of vitamin B_{12}, has been reported by Sidell, et al.[7] Two of our patients exhibited a skin rash while under treatment with cobalt-iron. In one patient with a long history of allergy the rash was relieved with pyribenzamine; in the other, therapy was discontinued about one month prior to delivery after seven months' medication.

Constipation was reported by two patients. It is difficult, of course, to ascribe this to our hematinic therapy since it is a common occurrence during pregnancy. There were no other side effects or toxic symptoms which could conceivably ascribe to the cobalt-iron preparation.

Summary

In a series of 40 consecutive pregnant women seen in an obstetrical practice, the use of a cobalt-iron preparation was highly effective in maintaining and increasing hemoglobin values during pregnancy.

Both hemoglobin and red cell values increased despite the dilution factor and fetal iron demand.

Pre-delivery values were as high as final postpartum values, thus indicating that these patients were hemopoietically normal at the time of delivery.

Final postpartum determinations were above those found initially. This suggests that these women had on the average, not only been in a negative state of iron balance at the beginning of pregnancy but were "borderline" anemic.

The reduced iron dosage used in this evaluation appears to obviate many of the side effects usually seen with iron therapy[11] without loss of effectiveness.

The iron-cobalt preparation used in this study appears to be an effective hematinic for routine use in the pregnant woman, and it would appear that the enhancement of erythropoietin production by cobalt improves iron utilization in pregnancy.

604 University Towers

References

1. Moore, C. V., and R. Dubach: J.A.M.A. *162:*197, 1956.
2. Holly, Roy G.: Clin. Obstet. & Gynecol. *1:*15, 1958 (March).
3. Gurney, Clifford W., Eugene Goldwasser, and Chao Pan: J. Lab. & Clin. Med. *50:*534, 1957 (October).
4. Holly, Roy G.: Obstet. & Gynecol. *9:*299, 1957 (March).
5. Judy, Harriet E., and Noreen B. Price: J.A.M.A. *167:*563, 1958 (May 31).
6. Darby, William J., William J. McGanity, Margaret P. Martin, Edwin Bridgforth, Paul M. Densen, Margaret M. Kaser, Pauline J. Ogle, Josephine A. Newbill, Anne Stockell, Mary Ellen Ferguson, Oscar Touster, G. Sydney McClellen, Claiborne Williams, and Richard O. Cannon: J. Nutrition *51:*565, 1953 (December).
7. Sidell, Chester M., J. Gordon Erickson, and Jack E. McCleary: Calif. Med. *88:*20, 1958 (January).
8. Eastman, N. J.: Obstetrical & Gynecological Survey, 1955 (June).
9. Rath, C.: Med. Clin. N.A. *34:*1779, 1950.
10. McLean, E.: Pediat. *7:*136, 1951.
11. Lillie, E. W., P. B. Gatenby, and H. C. Moore: Irish J. Med. Sci. *6:*304, 1954 (July).

Clinical Pathological Conference

R. E. Thomason General Hospital, El Paso

F. P. Bornstein, M.D., *Editor,* Case No. 1436, July 21, 1960
Presentation of case by William I. Coldwell, M.D.

History: Dr. Nathan Kleban:

A 65 year old unemployed, married Anglo-American man was brought to the hospital by ambulance at 4:17 a.m. on April 13, 1960.

For two years intermittent epigastric pain had been relieved by milk, Aspirin, Bufferin, or Alka-Seltzer. Appetite was variable. The patient felt weak, tired, and had lost an unknown amount of weight.

Five days before admission the same pain recurred, was severe and accompanied by vomiting of yellow material. The pain persisted with diminished intensity. The patient was brought to the hospital when he vomited an unmeasured amount of blood.

There had been moderate intake of alcohol until two years before admission. There had been no other symptoms or illness.

Physical Examination:

B.P. 70/40; T. 96.8; P. 84; R. 16.

The patient was drowsy, conscious, cold, pale. There was dry blood around the mouth. The lungs were clear. There were no abnormal heart findings. The abdomen was soft, non-tender. The liver was not enlarged.

Hospital Course:

The first unit of whole blood was started, 98 minutes after arrival in the emergency room. On the day of admission a surgical consultant found hypotension, pallor, slight epigastric tenderness, a tarry stool in the rectum. On the same day a medical consultant found no heart abnormality, no liver enlargement and no abdominal tenderness.

Six units of whole blood were transfused. Propantheline bromide (Probanthine), intravenous conjugated estrogens (Premarin), adrenochrome mono-semicarbazone sodium salicylate complex (Adrenosem) and morphine were administered. A soft diet was ordered.

Oxygen by mask for labored breathing was started on the afternoon of the second day. This complaint increased after another unit of blood and one liter of electrolyte solution were given intravenously. The patient was then given intravenous digitalis, aminophyline, and mercurial diuretic. Along with treatment for acute pulmonary edema, levarterenol bitartrate (Levophed) was used to combat re-appearance of shock.

Temperature rose to 102.6. Pooled pharyngeal secretions required suctioning. Penicillin, dihydrostreptomycin, tetracycline and quinidine were added to therapy.

On the third day the patient took a Sippy diet. Levarterenol was stopped. Shortly before death, about 60 hours after admission, temperature was 99, blood pressure 92/50, pulse 90 and respiration 32. He became agitated, complained that no one did anything for him and refused to keep his oxygen mask on, because he felt choked by it.

Laboratory Findings:

Blood counts: 4-13-60 — Hb. 7.4 gm., Ht. 23%, WBC 18,650, Stabs. 9, Segs. 65, Lymphs. 26. **4-13-60** — Hb. 7.8 gm., Ht. 23%, WBC 17,900, Baso. 2, Stabs. 7, Segs. 85, Lymphs 6. **4-13-60** — Hb. 9.3 gms., Ht. 28%.

Coagulation time: 4-14-60 — 4′ 2″, bleeding time 3′ 8″.

Prothrombin time: 4-14-60 — 77% (Pt. 15″, C. 13″).

Chemistry: 4-13-60 — Glucose — 118 mg.%; Urea Nitrogen — 33.8 mg.%; Calcium — 4.3 mEq/L; CO-2 capacity — 22 mEq/L; Chlorides — (as NaCl) — 108 mEq/L; Potassium — 4.0 mEq/L; Sodium — 137 mEq/L; Urea Nitrogen — 18.7 mg.%; Ven der Bergh Direct — .03; Indirect — .29. **4-15-60** — CO-2 capacity — 15 mEq/L; Chlorides (as NaCl) — 108 mEq/L; Potassium — 4.1 mEq/L; Sodium — 136 mEq/L.

Serology: 4-13-60 — Negative.

Urinalysis: 4-14-60 — Amber, cloudy, acid, S.G. 1.020, Albumin negative, sugar negative, WBC 10-15/1pf, RBC 3-5, few ep. cells, 3-5/1pf hyaline casts, many bacteria.

Electrocardiogram — Left bundle branch block R in V3-4 lower than V-2.

X-rays: 4-13-60 — Portable chest: Radiographic examination of the chest reveals a moderate amount of bilateral pulmonary emphysema. There is a generalized intensification of the pulmonary vascular markings consistent with congestive failure. There is prominence of the left ventricular segment of the cardiac silhouette. The aorta is elongated, tortuous and contains calcium in its arch. There is thickening of the lobar pleura on the right. The trachea occupies its usual position.

Conclusions: Bilateral pulmonary emphysema; findings consistent with arteriosclerotic cardiovascular disease with congestive failure; thickened pleura on the right.

4-14-60 — Portable chest: Re-examination of the chest and comparision with previous study now reveals considerable edema on the entire right lung and marked amount of edema on the left. The cardiac silhouette remains unchanged. The bony thorax and diaphragm reveal no significant change.

Conclusions: Marked pulmonary edema, bilaterally.

Clinical Discussion: Dr. Wm. I. Coldwell:

This is the case of a 65 year old man admitted apparently as an emergency because of GI hemorrhage, probably in the upper GI tract, with hematemesis and melena. According to the protocol he was hypotensive and shocky, without abnormal physical findings. His pulse was 84, which is rather unusual. No mention is made of the nature of the pulse. Certainly in hemorrhage generally the rate is more rapid.

There was a history of intermittent epigastric pain which was relieved by milk, Alka Seltzer and interestingly enough, by Aspirin or Bufferin. He had had fatigue and weight loss for some time and severe pain a few days prior to admission. After vomiting of non-bloody material it was noted that the pain had decreased in intensity.

A total of six units of blood was given, presumably in the first 24 hours. It is not stated whether this patient continued to bleed and therefore required such large amounts of blood. Certainly the blood counts were compatible with blood loss, the bleeding and coagulation times were normal, the prothrombin was somewhat abnormal on admission.

The patient is stated to have become dyspneic about 36 hours after admission; he required oxygen. Even in the face of this he received more fluids, more blood, more electrolytes. Apparently congestive failure with pulmonary edema was recognized, and the patient was treated with intravenous digitalis, aminophylin, mercurial diuretics.

Rales were noted, and an enlarged, tender liver; but no edema. He was also given morphine, and tourniquets and suction were used. He apparently had quite a bit of mucus congestion. He also received antibiotics, I presume on the basis of pulmonary congestion.

Of course in bleeding in the GI track there can be a fair amount of fever, usually 100 to 100.5 from the blood absorption alone, but transfusion reaction must be considered as a cause of fever in bleeding in the GI tract. This patient was also given quinidine, for what reason I am not quite sure; he did have a tachycardia, and his EKG, which we will mention a little more in detail later, showed a rapid rate.

The patient died evidently still in congestive failure since he was no longer hypotensive, and no mention is made in the protocol that he had any further bleeding. It is stated that the medical consultant, when he first examined the patient, found no evidence of cardiac disease; and yet the initial chest film showed rather definite evidence of congestive failure. I think that we might look at these X-rays, Dr. Ravel.

X-Ray Discussion, Dr. Vincent Ravel:

The films that were taken on admission are portable examinations. They show the intensified pulmonary markings that we interpreted as consistent with congestive failure. There is some prominence of the left ventricular segment of the cardiac silhouette, the aorta is elongated and contains calcium in its arch.

On the following day there was a generalized haziness over the entire right hemithorax, the markings on the left were also increased, and

the hilar shadows showed some prominence. We concluded these changes were consistent with pulmonary edema.

Dr. Coldwell:

Along with X-ray evidence of arteriosclerotic cardiovascular disease there is an abnormal EKG. The EKG we have is one which was taken the next morning after the patient had had digitalis and had had all this treatment for failure that we mentioned. This tracing is abnormal. Deep Q-waves are present, certainly suggestive of something more than a left bundle branch block. Obviously this patient had heart disease on admission.

The significant laboratory findings here other than those already mentioned is an elevated urea nitrogen. This was no doubt due to absorption of the hemorrhage in the GI tract. There is possibly also a depression of the renal function. The association with shock could produce this renal damage at this stage of the hemorrhage.

There were some hyaline casts and some pus cells in the urine which might pre-suppose some pre-existing renal disease, probably nephrosclerosis. However, the specific gravity was quite adequate and this probably rules out any significant renal disease.

The lowering of the BUN on the second determination would be consistent with bleeding since the elevation of the BUN is usually within the first 24 hours and then begins to trail off if no further bleeding occurs. The other laboratory studies were essentially normal.

In this patient the presence of hematemesis and melena localizes the bleeding to the upper GI tract, no doubt the esophagus, stomach or duodenum. The presence of both vomiting blood and melena does not localize the site of the lesion, rather usually it is only indicative of the severity of the bleeding and the presence of a large amount of blood in the stomach.

Blood counts and hematocrits in GI hemorrhage are not of much value in very early stages. Certainly this patient had a low hematocrit and hemoglobin on admission, which would make one feel that he had bled some time prior to admission, even longer than this history states, or he had had some slow hemorrhage over a period of time prior to admission.

Certainly the presence of shock cannot be determined by the level of the blood count in the early stages. After a period of a few hours, a compensatory dilution factor occurs which will give you a more accurate interpretation of the hematocrit and hemoglobin. In the very early stages you need Evans blue blood volume determinations or similar methods to evaluate the status of the patient.

After the initial compensation of the dilution factor has occurred, you can evaluate from the hematocrit and hemoglobin how much further bleeding is occurring. Early determination of urine volume is important in indicating how much shock the patient has, since low urine output often occurs with rather profound shock. The severity of the patient's shock does not depend primarily on the amount of blood loss but on the suddeness of the blood loss.

Now for a brief review of the elementary causes of upper GI hemorrhages. Of course peptic ulcer is the most serious and common one. Bleeding usually is caused from a rupture of a small vessel at the base of the ulcer or perhaps from the gastritis surrounding the ulcer.

Occasionally a large, sclerotic blood vessel may erode, usually in the older age group. This will often cause a fatal hemorrhage. In this case a rather scanty history elicited symptoms which would be consistent with a peptic ulcer. This patient had a decrease in his pain prior to admission, which would make one suspect a peptic ulcer. We see that rather frequently, that the pain will be relieved when an ulcer bleeds.

The second big cause of hemorrhage is gastritis or esophagitis, and certainly in ulcers bleeding may occur from a site even remote from the ulcer, such as an area of gastritis. This patient admitted to a moderate intake of alcohol, but this history often is unreliable. Many times a patient will claim moderate use of alcohol and this is the same as the usual two beers. This patient had also taken some Aspirin and Bufferin which of course can produce hyperacidity, gastritis; and has been reported to cause bleeding. Certainly the amount of antiacid in Bufferin is not sufficient to counteract hyperacidity, notwithstanding the TV commercials.

There is a higher incidence of peptic ulcer in pulmonary emphysema, and it would appear from this report that this patient had a fair degree of emphysema.

Carcinoma of the stomach comprises about three per cent of the cases of hemorrhage. Certainly this massive hemorrhage is not the usual picture that one sees. It can occur, but generally the bleeding is slower. This patient did complain of variable appetite and weight loss. He is in the age group for cancer, so certainly one must consider a cancer or malignant ulcer in this case.

Portal hypertension: About 10 per cent of the cases of bleeding fall into this group. This patient had no physical evidence of cirrhosis. He did have two liver function tests, a cephalin flocculation which was 1+ at 48 hours, and a thymol turbidity which was two units, both within normal range.

I think that as a single screening test for cirrhosis a 45 minute BSP test is probably the best test. However, in rather advanced cirrhosis the test may be very close to normal. Of course in cirrhosis the incidence of peptic ulcer is much higher than in other individuals, and the bleeding may often occur from the ulcer rather than from esophageal varices.

One must consider the other more rare causes of hemorrhage, such as benign tumors of the stomach, upper intestinal tract, hiatus hernia, various blood dyscrasias, or hereditary hemorrhagic telangiectasis. This patient had no diagnostic studies or laparotomy, so one would really be stabbing in the dark to make such a surmise.

It appears to me that this patient was definitely over-transfused. For an elderly individual with apparent damaged myocardium he was given a tremendous amount of blood. It was noted that the day when his blood was still being given the hematocrit had risen to around 40 per cent, hematocrit was 45, hemoglobin was 13.5; and I see little need to over-transfuse these individuals unless they continue to bleed, and then one should certainly consider laparotomy if they are at all in any type of condition for surgery. Certainly in an already damaged heart the tremendous overload of return to the right heart could throw this patient into congestive failure. It appears to me that he definitely developed congestive failure in this manner.

Of course it is possible that the patient during his period of hypotension had a myocardial infarction, which is not uncommon in shock from any cause. As we mentioned before, the EKG is rather suggestive to me of some recent myocardial damage. Of course it is well known that the diagnosis of acute recent myocardial infarction in the presence of a left bundle branch block is a rather difficult thing to do by electrocardiography. It appears that this patient was over-transfused and that he was precipitated at least into congestive heart failure by too much blood.

Therefore, my diagnoses are: 1. Upper GI hemorrhage, secondary to bleeding peptic ulcer, possibly malignant; 2. Congestive heart failure precipitated by excessive intravenous fluid; 3. Arteriosclerotic heart disease, left bundle branch block and possible recent myocardial infarction.

Dr. Russell Deter:

GI bleeding is always a fearsome thing. The surgical mortality amongst the dying is always high. If a patient on admission has a blood pressure of 70/40 and a pulse of 84, blood pressure and a pulse taken every 10 to 30 minutes for several hours will establish quickly whether the patient is still bleeding or not, and this has to be determined as soon as possible.

I do not think that a pulse of 84 is consistent with continued bleeding, if it is constant. I agree with Dr. Coldwell that six units of blood would be too much even if he is bleeding. If he required that much, he should have been operated on. These patients sometimes die on the table; but they die off the table, too. I would like to know the times in relation between the blood counts on the day of admission and the transfusions.

I believe in GI bleeding that blood should be given most judiciously, that it should be given extremely slowly, and with particular caution not to elevate the blood pressure. Often a clot will form at the end of a bleeding vessel and by giving the patient a lot of blood, one will sometimes raise the pressure sufficiently to knock out the clot and re-start the bleeding.

I would mention that we surgeons would prefer to have the bleeding stopped, to establish the location of the bleeding point, and then operate. This is not always feasible. I would certainly like to put in a word of caution about transfusions. Transfusions are live-saving procedures, but they are life-terminating ones, too.

Dr. Jack Postlewaite:

I think this patient had an ulcer and I think we should discuss the question of therapy. Granted that the patient had an ulcer, there is valid criticism why there was no surgical intervention, specially if radiology could have disclosed the location of the ulcer and whether it was benign or malignant. It is granted that hemoglobin and hematocrit should be taken regularly and that they are very important. Also the staff must observe whether the colon is filled with blood and how much blood is lost through the rectum.

I think replacing blood by knowing what was lost is important. The replacement is specially important in a cardiac patient who is anemic because of anoxia due to anemia; will not be tolerated by a damaged myocardium. The only other comment regarding transfusions is the possibility of a transfusion reaction. This may occur early or late and must be guarded against.

A final remark in differential diagnosis: severe hemorrhage can occur from gastritis, specially in the alcoholic. These people bleed actively and vividly like peptic ulcers and present a grave problem to the surgeon. As far as the cardiac status of the patient is concerned, I don't think it represents a contra-indication to surgery.

Clinical Diagnosis: Gastric ulcer.

Dr. Coldwell's Diagnoses: 1. Upper GI hemorrhage, secondary to bleeding peptic ulcer, possibly malignant; 2. Congestive heart failure precipitated by excessive intravenous fluid; 3. Arteriosclerotic heart disease, left bundle branch block and possible recent myocardial infarction.

Pathological Diagnoses: 1. Extremely severe coronary sclerosis with fresh subintimal hemorrhage in the right coronary artery; 2. Extensive recent infarction of myocardium on the posterior wall of left ventricle and interventricular septum; 3. Extensive myocardial scarring; 4. Acute pulmonary edema; 5. Acute and chronic passive hyperemia of the liver; 6. Bleeding peptic ulcer of duodenum.

Pathological Discussion: Dr. Bornstein:

We can then come to the autopsy protocol. For Dr. Van Wagoner's benefit, he might be a little bit suspicious, being new with us, we really are on the honor system, in spite of what I am going to say now. Dr. Coldwell hadn't the slightest chance or opportunity to look at the autopsy protocol.

On autopsy there was an elderly, fairly well nourished man, who didn't look too pale. There was some pleural effusion; there was minimal ascites. The large intestine was filled with clotted blood, the small intestine was empty, indicating to me that at the time of death the active phase of bleeding of the ulcer had subsided.

The ulcer itself was located directly beneath the pylorus in the first part of the duodenum on the posterior wall, a typical punched out peptic ulcer which measured 1.5 cm. in diameter and rested on the pancreas without penetrating it. There were a few petechial hemorrhages on the pericardium. The entire myocardium, specially in the region of the apex and septum, was markedly thinned out and there were large areas on the posterior wall and septum where the myocardium had been replaced by grayish-white scar tissue.

In addition there was an area measuring about 3 cm. in the posterior wall of the left ventricle where there was total loss of the myocardial pattern and there was yellowish, soft, homogeneous tissue. The left main descending branch showed extensive old calcification, as did the left main circumflex branch. The right coronary ostium was narrow and there was an area of constriction two cm. below the right coronary ostium where there was a fresh subintimal hemorrhage.

Microscopically the section from the stomach shows a typical benign peptic ulcer with a partially eroded artery. There was a thrombus at the end of the artery which may have caused termination of the hemorrhage. Sections from the myocardium showed scarring and areas of necrosis with extreme infiltration of segmented granulocytes and beginning necrosis, indicating an infarct of about three days duration. We then have in this patient, as predicted by Dr. Coldwell, two lesions: a peptic ulcer, bleeding; and rather severe coronary heart disease which finally produced infarction, scarring, decompensation and death.

In view of the various questions of hypo-oxemia of the myocardium on the one hand and overloading the myocardium with fluids on the other,

it would be nice to establish a definite correlation here. The patient was transfused immediately upon admission and died three days later. If you get a real yellow infarct, with complete disappearance of red blood cells from the infarction and nearly exclusive infiltration by segmented granulocytes, you have an infarct that is at least 48 hours old, but not much older than 48 hours.

I think we can say with reasonable certainty that the infarction occurred after and not before admission. Whether it then was still due to the existing anoxemia, or to the overloading, it is extremely difficult to say. It occurs to me that if you have extremely narrow and poorly functioning coronaries in a rather anemic patient, blood viscosity is much lower and should permit easier permeability of the coronaries by whatever red blood cells are available. If you increase the viscosity considerably, the impediment to the blood flow through a coronary system may have become much larger and thus contribute to the development of an infarct.

Dr. Deter:

I would like to answer in part the question of operating on a patient with a bleeding ulcer who has a badly damaged heart. To save this patient's life it isn't necessary to remove the stomach, which is a more or less formidable procedure in the presence of heart disease. If the patient continues to bleed, for the information of the house staff, a very simple maneuver can be done that only takes a few minutes.

You establish of course that the bleeding is coming from an ulcer, it may be gastric or duodenal. If it's duodenal you split the pylorus longitudinally, take a 20 cotton suture, take a figure eight stitch through the bed of the ulcer where the bleeding is from, be it pyloric or gastric, close the pylorus as you do in a pyloroplasty, get out and turn him back to the internist. You have stopped the bleeding, it is his worry now.

Dr. James C. Kussy:

All the anesthetic agents are myocardial depressants and I think that to give a patient anesthesia, a patient with a coronary, is really asking for it. On the other hand, it is worth the risk if it is a matter of stopping a hemorrhage that is also a life or death matter.

In regard to anesthesia for patients in heart failure, I have never given an anesthetic to a patient in heart failure, I don't know what the experience of the other anesthetists is. I think that I personally would use cyclopropane which would be giving the patient about 80 per cent oxygen all during that time, and it is an agent which tends to support blood pressure. I think it might work well in such a situation.

Coming Meetings

Southwest Obstetrical and Gynecological Society, Annual Meeting, Riviera Hotel, Las Vegas, Nev., Nov. 7-8, 1960.

Medical Society of the United States and Mexico, Annual Meeting, Guadalajara, Nov. 8-10, and Mazatlan, Nov. 11-12, 1960.

American College of Surgeons, Arizona Chapter, Fall Clinical Congress, Tidelands Motel, Tucson, Nov. 17-19, 1960.

American Rheumatism Association, Seventh Interim Scientific Session, Sheraton-Dallas Hotel, Dallas, Dec. 9-10, 1960.

American Cancer Society, Arizona Division, Ninth Annual Cancer Seminar, Tidelands Motor Inn, Tucson, Jan. 12-14, 1961.

Arizona Heart Association, Fourth Annual Cardiac Symposium, Biltmore Hotel, Phoenix, Jan. 27-28, 1961.

Texas Orthopaedic Association, Galveston, Texas, April 24, 1961.

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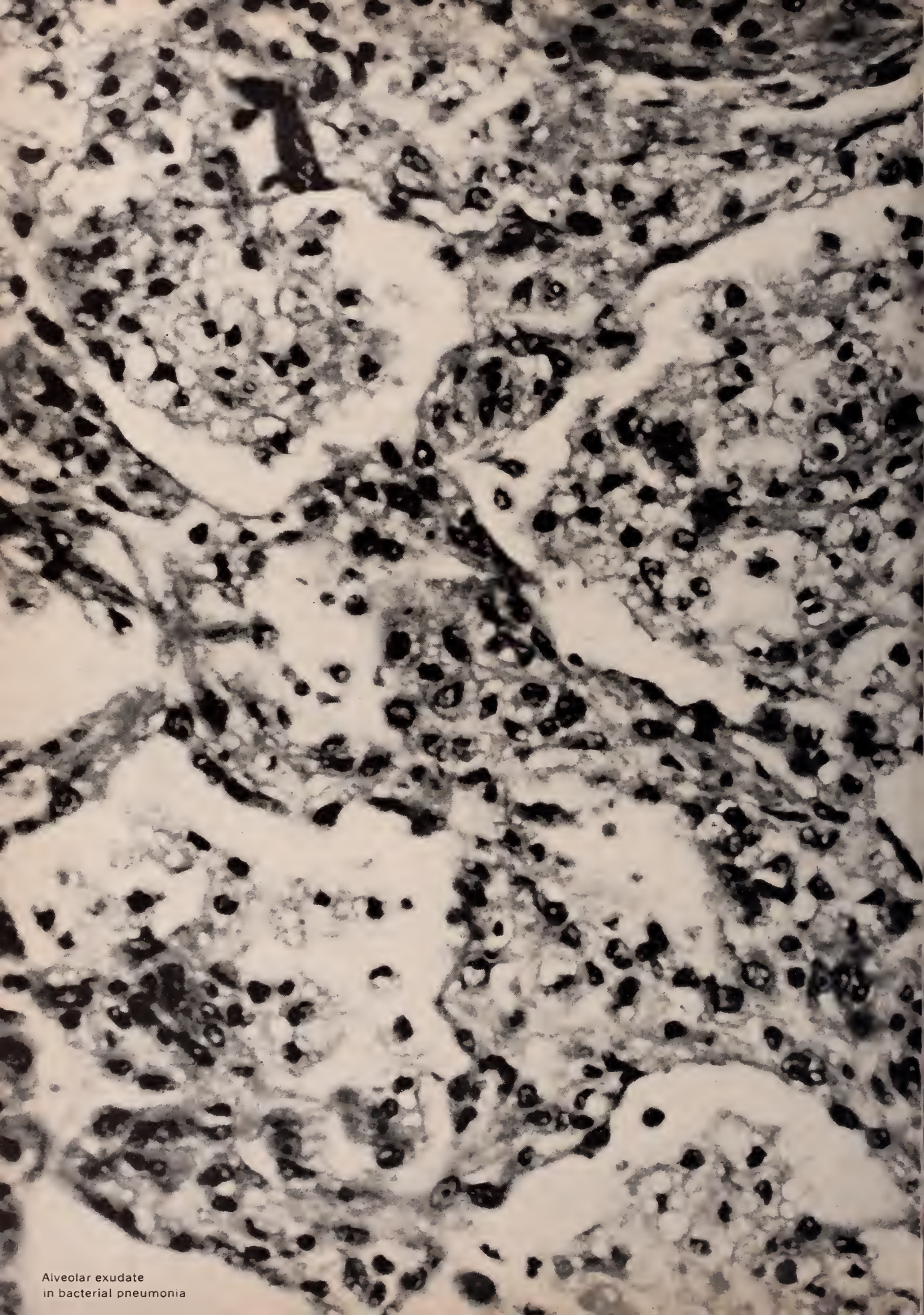
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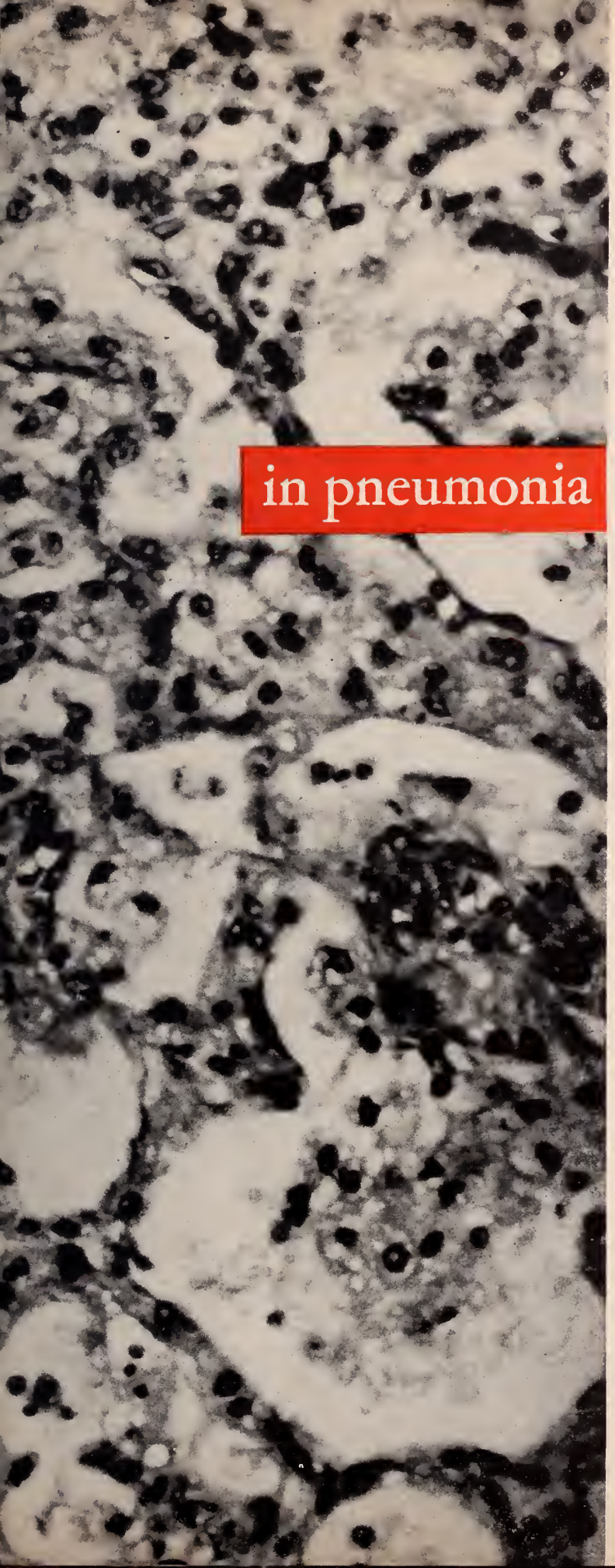
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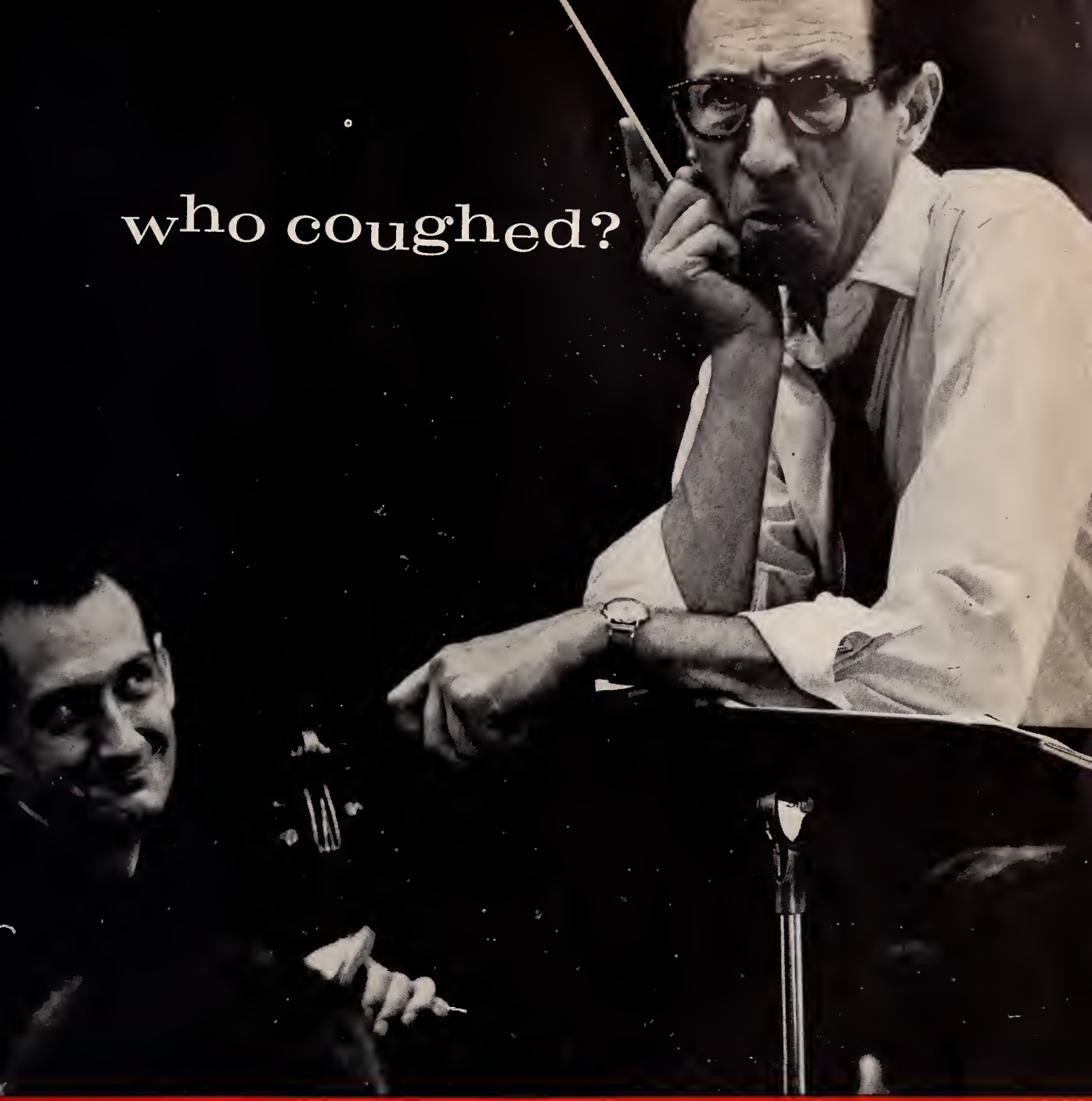
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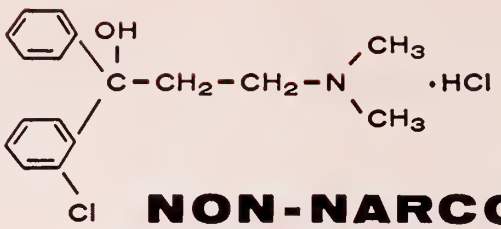
CIBA
SUMMIT, N. J.

*Coan, J. P., McAlpine, J. C., and Boone, J. A.: J. South Carolina M. A. 51:417 (Dec.) 1955. /2830M8

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cough suppressant action **equal to** narcotics

Though it reaches peak action somewhat more slowly, the cough-suppressant power of ULO is fully as great as that of narcotics.

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After reaching peak action, ULO maintains its maximal cough-suppressant effect undiminished for 4 to 8 hours.

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ULO is free from the limitations and undesirable side effects of narcotics... no constipation...no nausea...no gastric irritation...no appetite suppression...no tolerance development...no respiratory depression...no drowsiness.

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- No interference with alertness or activity; cough is suppressed for 4 to 8 hours without the dulling effects of narcotics
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- Soothes irritated membranes; mild topical anesthetic effect
- Does not cause constipation or laxation; no effect on intestinal motility
- Maintains effectiveness; no development of habituation or tolerance
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- Compatible with all other medications, including liquefacients, antihistamines, antibiotics, analgesics
- Nutrition and food enjoyment maintained; no appetite suppression, no nausea, no gastric irritation
- Does not depress respiration; permits maximum respiratory exchange

indications Upper respiratory infections • Common cold • Influenza • Pneumonia • Bronchitis Tracheitis • Laryngitis • Croup • Pertussis • Pleurisy

contraindications There are no known contraindications. Side effects are rare and mild. Nausea and dizziness have occurred infrequently, vomiting and drowsiness rarely.

dosage Adults: One teaspoonful (25 mg.) 3 or 4 times daily as required.

Children: 6 to 12 years of age, ½ to one teaspoonful (12.5 to 25 mg.) 3 or 4 times daily as required.

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ULO Syrup, 25 mg. per 5 cc. (teaspoonful), in bottles of 12 fluid ounces.

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December, 1960

Founded 1916

an antibiotic improvement designed to provide greater therapeutic effectiveness



now Pulvules® Ilosone®

(propionyl erythromycin ester lauryl sulfate, Lilly)

in a more acid-stable form assure adequate absorption even when taken with food

Ilosone retains 97.3 percent of its antibacterial activity after exposure to gastric juice (*p*H 1.1) for forty minutes.[1] This means there is more antibiotic available for absorption—greater therapeutic activity. Clinically, too, Ilosone has been shown[2,3] to be decisively effective in a wide variety of bacterial infections—with a reassuring record of safety.[4]

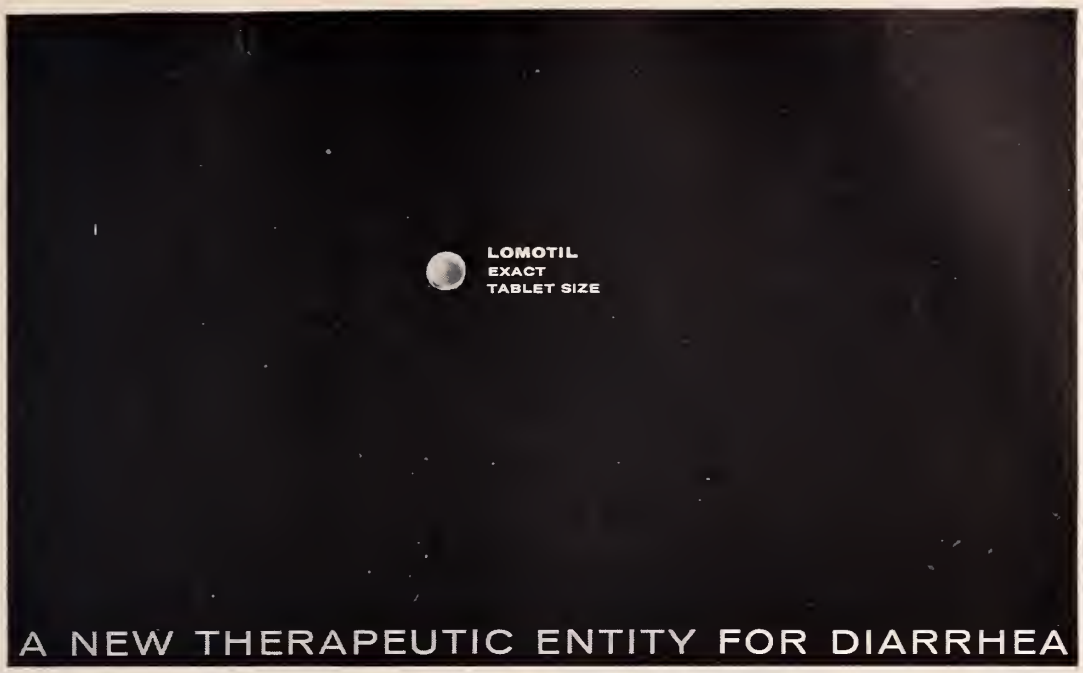
Usual dosage for adults and for children over fifty pounds is 250 mg. every six hours.
Supplied in 125 and 250-mg. Pulvules and in suspension and drops.

1. Stephens, V. C., *et al.:* J. Am. Pharm. A. (Scient. Ed.), *48*:620, 1959.
2. Salitsky, S., *et al.:* Antibiotics Annual, p. 893, 1959-1960.
3. Reichelderfer, T. E., *et al.:* Antibiotics Annual, p. 899, 1959-1960.
4. Kuder, H. V.: Clin. Pharmacol. & Therap., in press.

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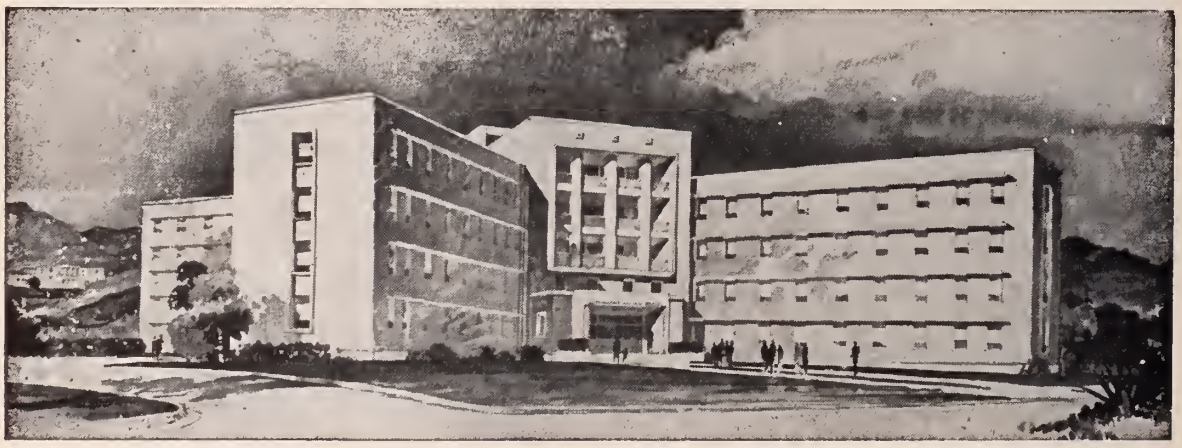
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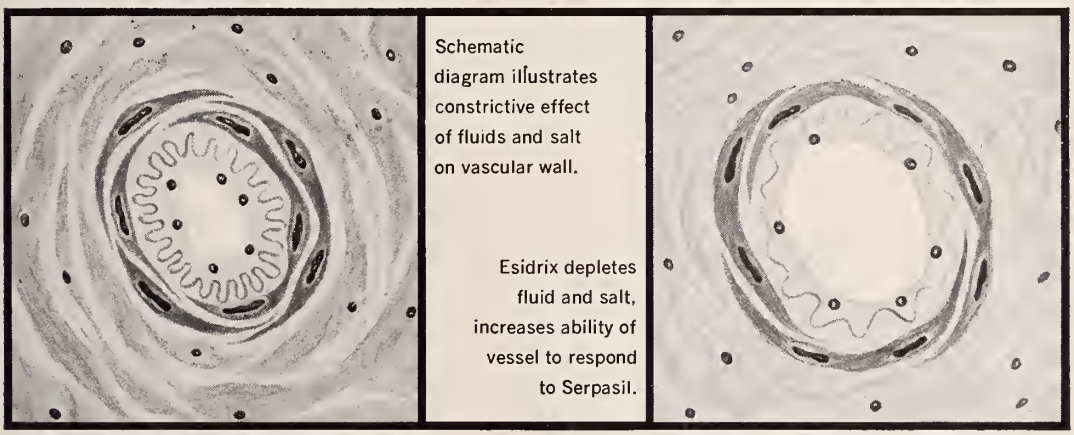
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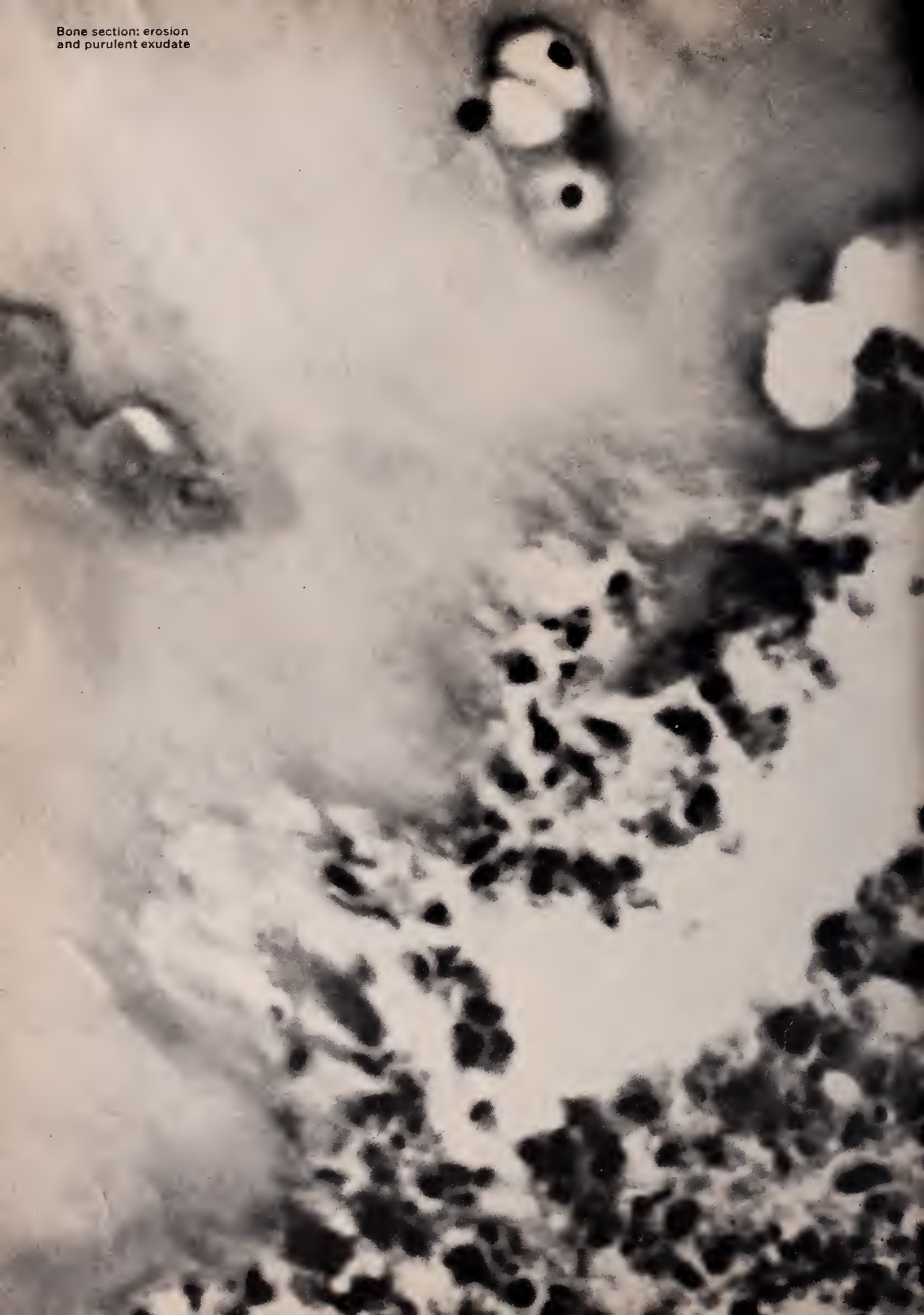


Schematic diagram illustrates constrictive effect of fluids and salt on vascular wall.

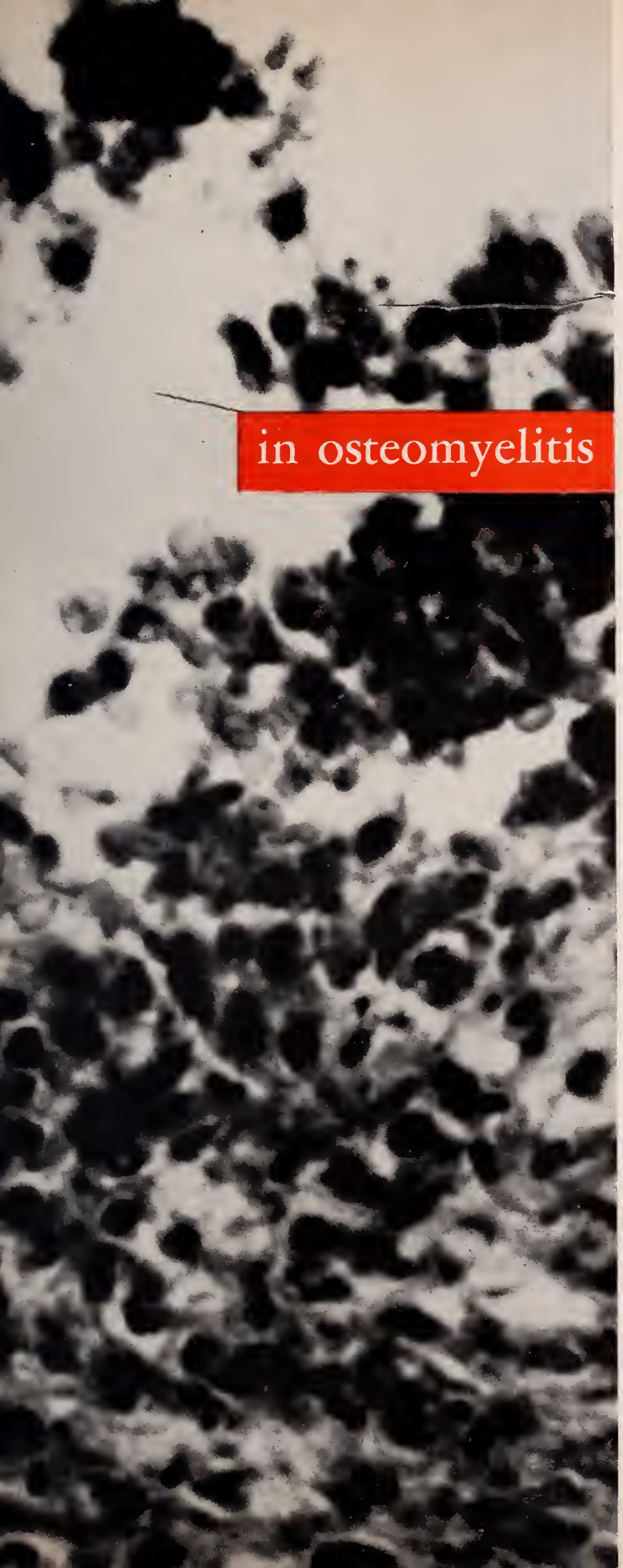
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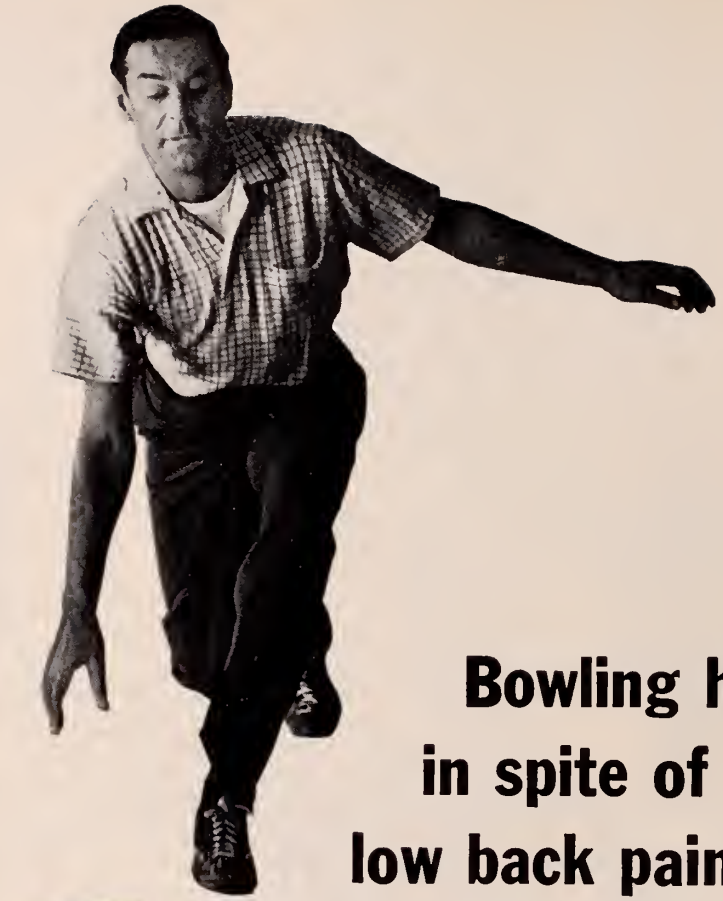
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1. Kearney, R. D.: *Current Therap. Res.* 2:127, April, 1960. **2.** Cohen, A. I.: *Current Therap. Res.* 2:374, Aug., 1960.

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1. Chapman, T.L., Expectant treatment of benign prostatic enlargement, **Lancet** 2:684, 1949.
2. Hinman, F., The obstructive prostate, **J.A.M.A.** 135:136, 1947.
3. Feinblatt, H.M., and Gant, J.C., Palliative treatment of benign prostatic hypertrophy, **J. Maine M.A.** 49:99, 1958.
4. Ibid. #3, **Southwestern Med.** 40:109, 1959.

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Coming Meetings

American Rheumatism Association, Seventh Interim Scientific Session, Sheraton-Dallas Hotel, Dallas, Dec. 9-10, 1960.

American Cancer Society, Arizona Division, Ninth Annual Cancer Seminar, Tidelands Motor Inn, Tucson, Jan. 12-14, 1961.

International Medical Assembly of Southwest Texas, 25th Annual Meeting, Granada Hotel, San Antonio, Jan. 23-25, 1961.

Arizona Heart Association, Fourth Annual Cardiac Symposium, Biltmore Hotel, Phoenix, Jan. 27-28, 1961.

Texas Orthopaedic Association, Galveston, Texas, April 24, 1961.

Postgraduate Course To Be Held in El Paso, Jan. 22

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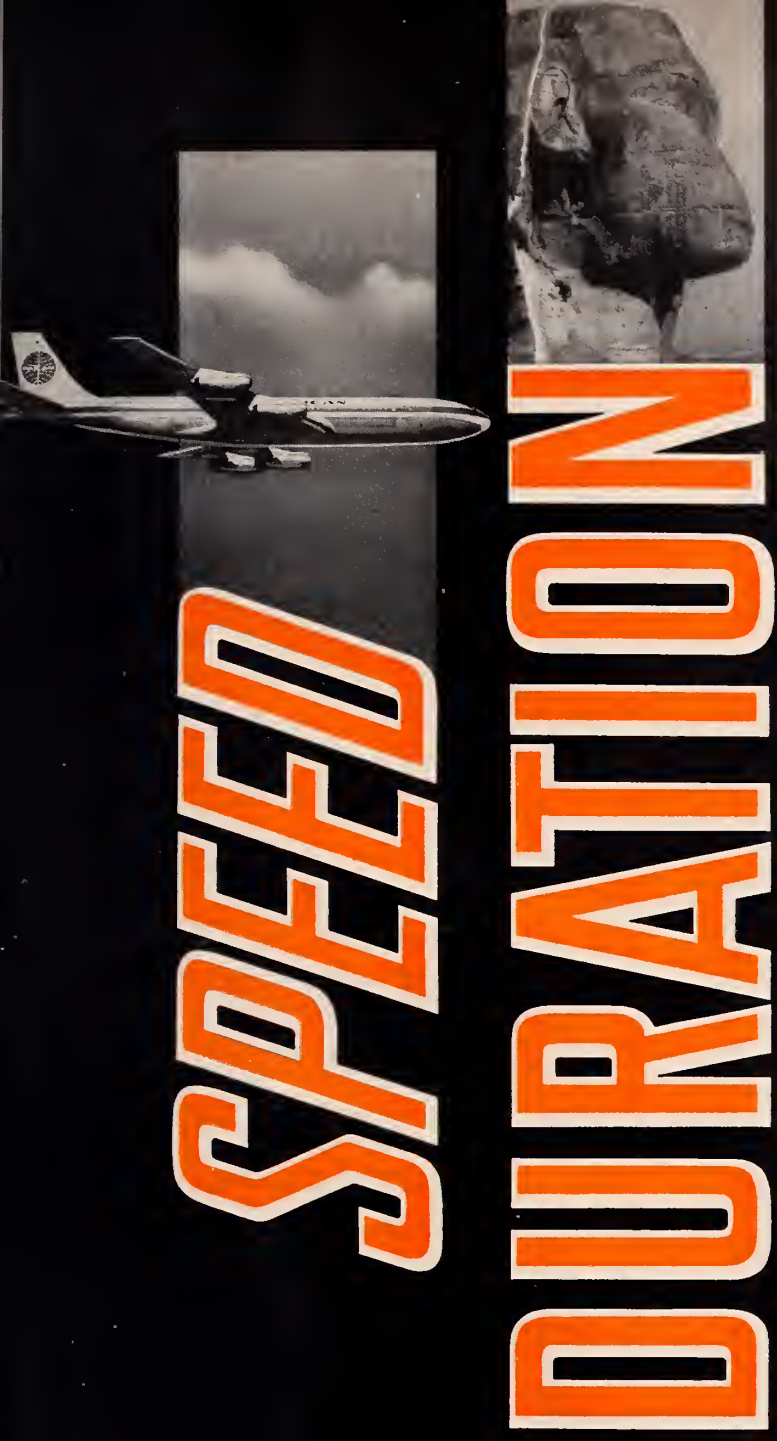
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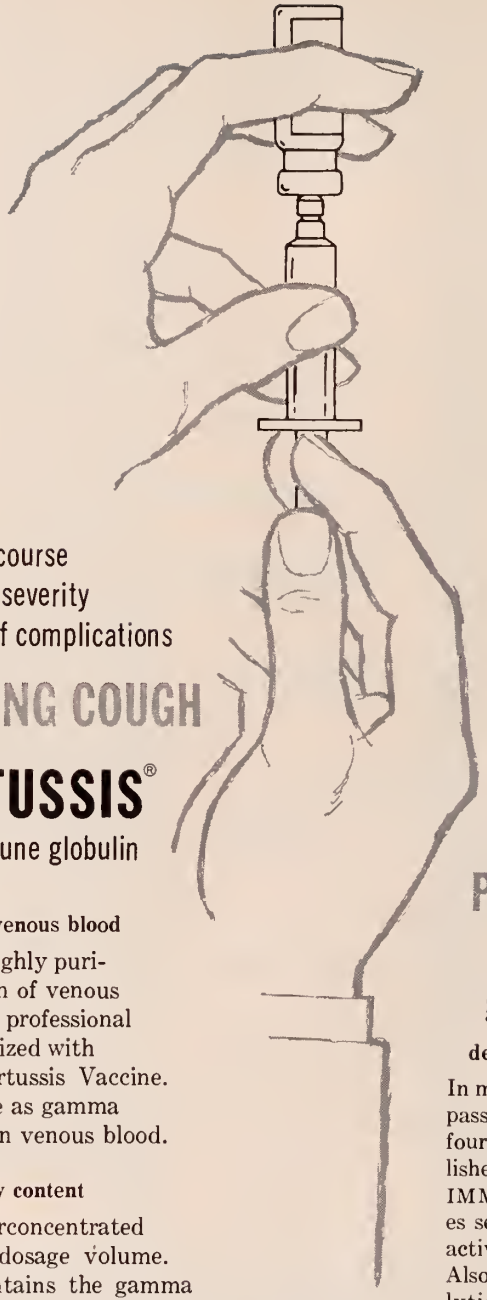
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SOUTHWESTERN MEDICINE

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Dr. Burr of Tucson Elected President of Southwestern Medical Association

Dr. Sherwood Burr of Tucson was elected president of the Southwestern Medical Association at its 42nd annual meeting in El Paso October 20-22, 1960.

Other new officers are Dr. Harold J. Beck, Albuquerque, president-elect; Dr. David Russek, Chihuahua City, Mexico, vice-president; and Dr. Merle D. Thomas, El Paso, who was re-elected secretary-treasurer.

New members of the executive committee are Dr. John Dettweiler, Albuquerque; Dr. Russell L. Deter, El Paso, retiring president; Dr. Louis G. Jekel, Phoenix; Dr. Leland Evans, Las Cruces, N. M.; Dr. Darwin Neubauer, Tucson; Dr. Carlos Tapia, Hermosillo, Mexico; and Dr. Louis W. Breck, El Paso, managing Editor of **Southwestern Medicine.**

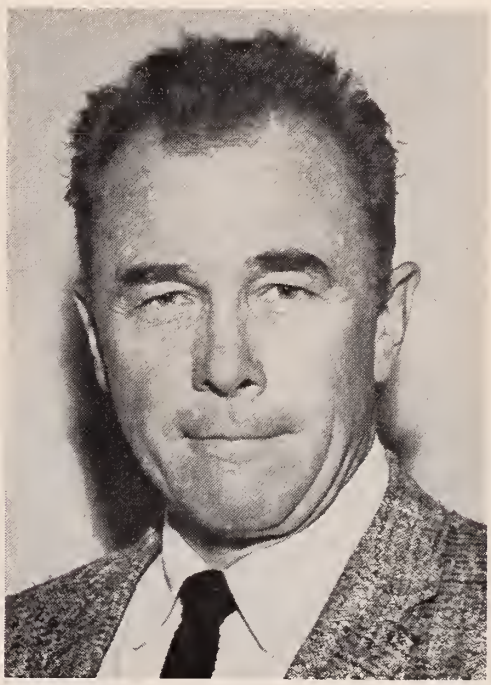
Las Vegas, Nevada, was selected as site for the 1961 meeting, which will be held October 19-21, 1961. Headquarters for the meeting will be in the Tropicana Hotel.

Speakers

Speakers were: Dr. Ernest Craige, associate professor of medicine at the University of North Carolina School of Medicine; Dr. Donald Stubbs, clinical professor of Anesthesiology at George Washington University Medical School and chairman of the board of Blue Shield.

Dr. Philip J. Hodes, professor and chairman of the Department of Radiology at Jefferson Medical Center in Philadelphia; Dr. Henry N. Harkins, professor of surgery at the University of Washington in Seattle.

Dr. Harold W. Brown, clinical professor of ophthalmology at New York University, Bellevue Medical Center; and Dr. Ernest E. Muirhead, professor and chairman of the department of clinical pathology at Wayne University in Detroit.



Dr. Burr

Dr. Charles E. Irvin, Ormond Beach, Fla., well known as the "Merchant of Message," spoke on "The Inside Story of an Outside Chance" at the association's annual banquet.

The new president, Dr. Burr, was born in Eugene, Ore., and received his B.A. at the University of Oregon and his M.D. at the University of

Oregon School of Medicine. He holds an M.S. in ophthalmology from the State University of Iowa. He interned at the University of Oregon Hospitals and Clinics and then took a four-year residency at the State University of Iowa Medical School.

He began the practice of medicine in 1948 in Bakersfield, Calif., and in 1949 moved to Tucson, where he at first was associated in practice with Dr. C. S. O'Brien, who was his professor in ophthalmology at the State University of Iowa and who is now retired. His offices are at 45 N. Tucson Blvd., where he is associated with Dr. James Calkins and Dr. A. K. Hansen.

Dr. Burr is certified by the American Board of Ophthalmology and is a Fellow in the American Academy of Ophthalmology and Otolaryngology. He is a member of the Association for Research and Ophthalmology and the Pan American Ophthalmological Association. He is a consultant in ophthalmology at the Davis Monthan Air Base, the veterans hospital, and the Arizona Children's Colony in Coolidge, Ariz. During World War II Dr. Burr served as a flight surgeon in the Air Force with 40 months in the Pacific Theatre, emerging with the rank of lieutenant colonel.

He is a member of Nu Sigma Nu, Phi Delta Theta, Rotary Club and St. Michael's Episcopal Church. He and his wife reside at 3135 Via Palos Verdes with their three children, Minda 12, Sherwood, Jr., 10, and Bradley, 8.

Presidential Address

In his presidential address at opening of the association's meeting, Dr. Deter charged that the United States has already gone far down the road to socialism and he urged physicians to join the fight for the preservation of free enterprise.

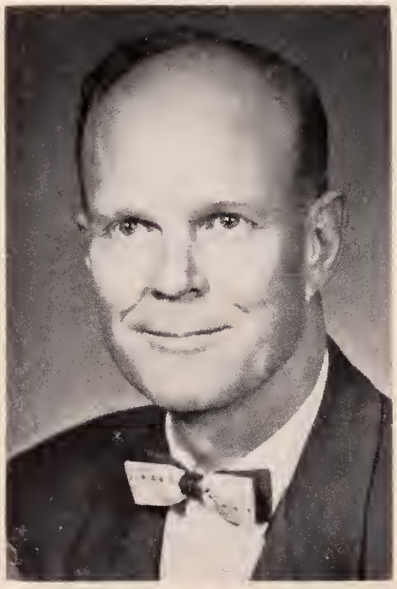
"We have got to keep the boat from going over the rapids," he said. "The time has come when we as physicians are in position to tell the story of the American system. We should go out and sell free enterprise to our patients."

Dr. Deter took a slap at Government farm support prices and said, "We are no more responsible for failure on the farm than anywhere else. If farmers cannot succeed on the farm in a given period of time they should give it up. Suppose we had started to support the harness industry when the horse began to go out—we'd have one hell of a pile of harness on hand now."

He said that "dictators always look good—until the last ten minutes."

"We have only one thing to sell—skill," he said. "Skill has to be delivered to the consumer. Not answering the telephone or not making house calls is not delivering our skills."

Dr. Beck



Dr. Russek



Dr. Thomas



Ten Point Plan to Improve Health of 675,000 Texans Drafted by Dr. Deter

The Texas Medical Association has set forth a ten-point plan of action designed to improve health care for the 675,000 Texans who are 65 years of age or older. The plan was drafted by Dr. Russell L. Deter, El Paso, Vice President, who is coordinating many Association Committee activities in the field of aging. Dr. Deter also serves as Co-Chairman of the Sub-Committee on Health to the Texas Governor's Conference on Aging, and has been appointed as a delegate from Texas to the White House Conference on Aging.

Text of the plan is as follows:

1. Responsibility for Care: In keeping with American traditions, the individual has the primary responsibility for his own medical care. When the individual is unable to provide this care for himself, the responsibility rightfully should pass to his family, then to the community, the county, and the state. Only when all of these fail should the federal government assume a role, and then only in cooperation with other governmental bodies cited previously. Specifically, the federal government should not assume the full responsibility solely upon the basis of default by local and state resources.

2. Role of Physician: Physicians, by tradition, have a responsibility to provide professional services to his patients, regardless of ability to pay. Physicians will continue, as they have in the past, to provide medical services for the aged, including the indigent and the near needy, at fees they can afford, or without charge, as their resources might indicate.

3. Voluntary Health Insurance: Voluntary health insurance is an effective mechanism for financing health care costs, and coverage should be extended to as many of the aged as is practicable and possible. Special health insurance and prepayment policies which are tailored to meet the needs of the aged should continue to be developed and promoted. In addition, in order to achieve the long-term objective of extensive coverage, all individuals in younger years who are gainfully employed should be encouraged to purchase voluntary health insurance which will carry over beyond age 65, either on a paid-up basis or by permitting individuals to continue coverage following their retirement.

4. Assistance Programs for Indigent and Needy: Programs of health care are available to the indigent through Old Age Assistance. The 86th Congress enacted legislation providing for federal grants-in-aid to the states to help pay medical and hospital bills of needy persons 65 and older. The House of Delegates of the Texas Medical Association is on record favoring the State vendor's medical care program, and the Association will lend its full support in implementing a plan which provides high quality medical care, and embraces such basic principles as free choice of physician and preservation of the traditional doctor-patient relationship. The vendor's medical care program should be limited only to those who need help, and should not include those who can provide for themselves.

5. Personnel and Facilities: To keep apace of the demands of an expanding population, and the increasing number of older people, the Texas Medical Association recognizes the need for additional personnel in the medical sciences and for more facilities. The House of Delegates has advocated the erection of a fourth medical school in the State. The first step toward this objective has been realized with the authorization of a new medical school by the State Legislature. Similar attention must be given to educating professional and allied health personnel who assist the physician in the care of the patient. Nursing resources particularly must be enhanced. More students should be recruited, and encouragement, should be given to the Association's Woman's Auxiliary and other groups which sponsor Future Nurses Clubs. Many graduate nurses who have become inactive should be provided opportunities to return to their profession. Nursing educational and training programs should be expanded. The Association should continue to work for better nursing home facilities for the long-term care of aged persons. Particular attention also must be given to the establishment of additional facilities for the care of the chronically ill, for rehabilitation, and for neuropsychiatric care.

6. Home Nursing Care: Care of the aged at home is psychologically, medically, and financially desirable. The Association encourages the development of programs to promote home nursing care. These include homemaker's services, which provide opportunities for those caring for aged mothers and fathers to continue gainful employment; central counseling and day care agencies; visiting nurse services, and rehabilitation resources.

7. Organizational Endeavors: For many years, the Texas Medical Association has had an active Committee on Aging. This Committee has intensified its activities, and educational endeavors in recent years in order to implement a multi-phased program. Many other Association committees, such as Voluntary Health Insurance and Patient Care, continue to contribute in their fields of responsibility. The present high interest of the Association is reflected in the action of the 1960 House of Delegates which charged the Vice-President to

coordinate all activities in regard to health care for the aged. In addition, the Texas Medical Association has joined hands with the Texas Dental Association, the Texas Hospital Association, and the Texas Nursing Home Association to form the Texas Joint Health Council for the Aging. The Texas Medical Association has urged each of its component county medical societies to activate a Committee on Aging, and to assume leadership in worth-while programs, such as the promotion of more and better nursing home facilities and in sponsoring well-adult conferences on aging.

8. Educational Activities: The Texas Medical Association encourages broad educational programs at all levels to educate and prepare men and women to face the problems of aging more resourcefully. For all of the health professions, special instruction should be included in undergraduate curricula and in post graduate courses. The Association also recognizes the need for increased health education activities, such as a statewide informational program for the elderly on the importance of periodic health examinations and the role of preventive medicine in maintaining good health. Educational programs in accident prevention, designed specifically for the aged, also deserve attention. Many older persons are unaware of the need for continuing healthful nutrition and other practices which contribute to health. Above all, the "Will to Live" is essential to continuing health.

9. Attitude Toward Aged: A basic change in attitude toward the aged is imperative. The individual who attains age 65 does not suddenly become non-productive and senescent. On the contrary, most persons 65 and older are reasonably well, and many are willing and able to work. The Texas Medical Association lends its full support to assisting the elderly to attain increased productivity by eliminating compulsory retirement provisions and by permitting voluntary change of work.

10. Purchasing Power of the Dollar: Economic problems of the aged have been intensified during the past 20 years by the constant and continuing erosion of the purchasing power of the dollar and by increasing taxes which claim a larger share of fixed incomes. Psysicians and professional men and women, business and industry, labor, and government can make a significant contribution to the economic welfare of the aged by refraining from embracing those activities which are inflationary in character, and by helping to maintain the purchasing power of fixed pension and annuity benefits.

To implement the 10-point program, it is recommended that:

1. The Texas Medical Association give firm backing to the recommendations of the Health Subcommittee of the Governor's Conference on Aging.

2. County medical societies initiate a state-wide program on the very special problems of aging, other than the disease processes.

3. County medical societies institute education of elderly individuals on the importance of:

   a. Periodic health examinations and preventive medicine in the maintenance of good health.

   b. Strong accident prevention education to the elderly.

   c. Proper nutrition in maintenance of good health.

4. County societies undertake an active program on improving quality and quantity of nursing homes and nursing home personnel, as well as better medical supervision of these nursing homes.

5. County societies should take leadership in well-adult conferences on aging.

6. County societies institute programs at all levels —professional and lay—to train young men and women to face the problems of aging more resourcefully.

7. County medical societies and the Texas Medical Association devote considerably more effort to nurse recruitment, increasing numbers of nursing schools and making a determined effort to solve the problems of the registered nurse shortage in Texas. (Your attention is particularly called to recommendation No. 4 Health Subcommittee, Governor's Conference on the Aging.)

8. Texas Medical Association encourage establishment of additional chronic and convalescent or terminal care units in connection with new and existing hospitals.

9. The Texas Medical Association and each county society in urban areas, and in many instances rural areas, make a concerted effort to establish a local committee on aging, as outlined in Recommendation No. IX, Subcommittee on Health, Governor's Conference on the Aging.

10. All county societies be urged to use what facilities are available locally, wherever possible, and not establish new organizations which would be a duplication of effort when a similar organization is already doing the job and merely is in need of more help. Don't let us be guilty of promoting "edifice complex" in our local government.

So that the Texas Medical Association not become the benevolent parent who is going to do all of these things for the individual physician and the individual county medical society, each county medical society is charged with the responsibility of forwarding to the Executive Secretary of the Texas Medical Association a semi-annual progress report on the above recommendations. The Executive Secretary then will present an annual progress report to the House of Delegates.

Santa Fe Seminar

St. Vincent Hospital, Santa Fe
May 24, 1960

Chairman: Harry D. Ellis, M.D.
Case Presentation: Fred Soldow, M.D.
Seminar Summary: Matthew Tandysh, M.D.

Hemolytic Disease of Newborn

Dr. Harry Ellis:

The cases selected for presentation this evening illustrate many of the variable problems encountered in hemolytic disease of the newborn, and I think they also point out that locally we are making progress in our management of these problems. Dr. Fred Soldow will present the cases in summary form. Dr. Soldow.

Presentation of Case Summaries: Dr. Fred Soldow.

Case No. 1 T. A. W.

On September 27, 1955, a 7 lb. 5 oz. baby girl was delivered normally at St. Vincent Hospital. The baby was very pale and its cry was weak.

The skin was yellow at birth and its subcutaneous tissues felt edematous. The spleen was palpable, reaching to the iliac crest. The liver was down two fingers.

Laboratory examinations revealed a hemoglobin of 5.4 grams and a WBC of 77,600 per cmm. which included many nucleated red blood cells.

Positive Coombs Test

The direct Coombs test was positive and the serum bilirubin level was 110 mg/100 ml.

The past history revealed that a sibling had been delivered in similar condition and had been given an exchange transfusion. Two children previous to this were normal. Shortly before this delivery the mother had an anti D antibody titer of 1-80.

Two hours after delivery an exchange transfusion was carried out. The subsequent clinical course was uneventful and the baby was discharged in good condition.

Case No. 2 B. E. W.

On July 7, 1954, a one month premature, 4 lb. 10 oz. male baby was delivered normally at St. Vincent Hospital. Examination at birth revealed a suggestion of jaundice and at two hours of age the baby was definitely jaundiced.

The past history revealed one previous child, living and well. There were no previous miscarriages and no previous transfusions. The mother was Rh^o positive and her serum contained no anti Rh^o antibodies.

Laboratory data: WBC 19,000/cmm. with six nucleated RBC/100 WBC. Hgb. 22.3 grams.

Coombs test: Negative. Baby's blood type: A Rh^o positive. Complete blood type A $\frac{CDe}{C\text{-}e}$. Mother's type: O $\frac{CDE}{C\text{-}e}$. Father's type: A $\frac{CDe}{C\text{-}e}$

Anti-A Antibodies

Immune anti A antibodies were found later in high titer in the mother's serum (7/15/54).

Following birth, the baby's hemoglobin fell to 19.0 grams over a period of three days and then to 16.5 grams in the subsequent three days. On 7/10/54, mild opisthotonos was noted and jaundice was marked. The liver was felt two fingers below the right costal margin and the spleen was not palpable. On 7/11/54, opisthotonos was increased and the deep reflexes were increased.

By 7/15/54, the jaundice was clearing and neurologic symptoms were subsiding. On 7/19/54, the baby was discharged in fairly good condition. Subsequently, the baby developed cerebral palsy and a hearing defect.

Case No. 3 J. P. R.

On May 10, 1960, a 6 lb. 2 oz. male baby, delivered normally, now age 40 hours, was admitted as a transfer from another hospital. The referring physician stated that the baby became jaundiced at the end of 24 hours. At 38 hours of age, the serum bilirubin was 11.1 mgs per cent and

this was almost all indirect reacting bilirubin. The hemoglobin was 18 grams. The baby had developed by this time moderate jaundice.

Bilirubin 20 Mgms/100 ML

Shortly after admission to St. Vincent Hospital, the hemoglobin was found to be 20 grams and the serum bilirubin (mostly non-conjugated) was 19.5 mgms/100 ml.

The direct Coombs test was negative. The baby's blood type was O Rh° positive. The mother's blood type was A Rh° negative.

Laboratory studies also revealed an indirect Coombs test using maternal serum and baby's cells to be negative.

The maternal history revealed a miscarriage one year prior to this child, no previous transfusions and no other children. The physician who delivered this baby also delivered the mother and four siblings of the mother and found in his records that the mother and her four siblings had all been more jaundiced than usual after birth. This information was also given by the maternal grandmother.

Normal Except Icterus

Examination of the baby on admission revealed normal findings except for moderate icterus. The liver was down one finger and the spleen was not felt.

Observation of the baby for 24 hours revealed no increase in serum bilirubin and no decrease in hemoglobin level.

The baby was discharged in good condition 5/11/60.

Dr. Ellis:

We are fortunate this evening in having Dr. Matthew Tandysh with us. As most of you know, Dr. Tandysh is in practice in Albuquerque and is one of our state's outstanding pediatricians. I would also like to welcome Dr. Tandysh's residents who have come with him here tonight for the seminar. Dr. Tandysh.

Discussion: Dr. Matthew Tandysh:

I received a copy of the presentation prior to coming here so I cheated a little bit and studied it before hand.

The first case is very interesting in that it represents at least a mild type of hydrops which is a most severe type of newborn hemolytic disease.

I was surprised in reading the case summary to see that after only one exchange transfusion, the baby did so well. With a hemoglobin of 5.4 grams, I'm sure that there was some cardiac failure. There is nothing mentioned about pulmonary edema and I guess the baby didn't get into any trouble. Here is a baby who was Rh° positive born to a mother with a high titer, who received an exchange transfusion at two hours of age, which is optimum timing. Actually, I've seen these start within minutes after the baby's delivery.

Anticipate Trouble

This is indicated in situations where you know that the mother has lost a child because of hydrops and you know that the father is Rh° positive and homozygous. Then you certainly can anticipate trouble. In such circumstances an exchange transfusion ought to be anticipated prior to the delivery of the child.

The second case is interesting in that you don't have any mention of serum bilirubin, only that the baby appeared yellow. This case represents hemolysis due to an antibody different from an Rh antibody, namely an immune A antibody.

We are now aware that more than 50 per cent of all hemolytic disease of the newborn results from this type of sensitization, rather than from Rh sensitization. Here is a mother who is type O and the baby type A. The mother had a very high anti A titer and I'm sure that this was the major element producing the baby's jaundice.

Immaturity

Another contributing factor is immaturity. We know that bilirubin is conjugated in the liver with glucuronic acid which makes it easier to excrete. With immaturity there is an inability to conjugate bilirubin from the indirect to the direct form, often leading to an accumulation of this apparently toxic material.

The last sentence that the baby developed cerebral palsy and a hearing defect subsequently is interesting because we know that kernicterus in the neonatal period is responsible, or can be responsible for this. We also know that prematurity has a high incidence of mental deficiency, cerebral palsy, and other nervous system defects.

Four Consequences

As an aside, Dr. Richard Day from Pittsburgh, while at the recent State meeting in Albuquerque, mentioned that there are four consequences of

hemolytic disease of the newborn. One was death, either immediate or subsequent; another was mental retardation; the third was cerebral palsy and various neurological deficits; and the fourth, he said with a wry smile, was a law suit.

Then he discussed the case of a child who was mentally defective, having had a high neonatal bilirubin and two exchange transfusions. The problem was the exact etiology of the retarded mentality. We know that children who are born jaundiced can suffer unrelated retardation.

The third case is probably accentuated physiological jaundice. The baby did not receive an exchange transfusion and actually an exchange transfusion was not indicated. I think most of the authorities feel that only if the indirect or the non-conjugated portion of the bilirubin reaches or approaches 20 mgs., is an exchange indicated. This child's jaundice appeared late. It was transferred after it was 40 hours of age. We know that the hemolytic types of jaundice appear usually within the first 24 hours whereas the physiologic type is more insidious. The latter type often leads to little loss or depletion of hemoglobin.

Hemoglobin 20 Grams

This baby's hemoglobin was 20 grams shortly after admission to St. Vincent Hospital and decreased only a little. An interesting side light concerning hemolytic disease is that when the Rh factor was discovered some investigators wondered why a mother who had had two or three previously hydropic babies would suddenly deliver a baby who became jaundiced the second or third day, never required an exchange transfusion, and then did very well.

It was subsequently learned that there may be competition between A and Rh antigens. When a mother who is Rh negative, type O, carries an Rh positive baby, type A, some of the baby's blood cells may go through the placenta into the mother's system and there stimulate antibody production. In such a case antigen A (or B) may take preference over Rh.

Dr. Ellis:

Thank you, Dr. Tandysh. The next discussion is listed as kernicterus, but it will include discussion of some other basic problems. Dr. Carol Smith.

Kernicterus: Dr. Carol Smith.

In simple terms kernicterus may be defined as greenish yellow staining of the nuclei of the brain, particularly the basal ganglia. It seems to be a little more selective in that area. This usually leads to such permanent brain damage as greater or lesser degrees of spasticity, choreo-athetosis, mental retardation, deafness, blindness, etc.

You may have death in a few days to weeks if the process is sufficiently severe. It is also of interest that until recently, approximately 10 per cent of all children admitted to institutions for the mentally retarded had as their etiology, kernicterus.

Etiology of Kernicterus

What is the etiology of kernicterus? The normal red cells break down in all of us and that includes the newborn. Bilirubin and other compounds are derived. Bilirubin is apparently the offender here. Normally bilirubin is converted into a bilirubin glucuronide which is so-called direct bilirubin. In field mice, it is believed that this conversion may occur via placental factors in the fetus but no one is really sure about that. It is then excreted as direct bilirubin or bilirubin glucuronide. In the newborn and especially in the premature newborn, glucuronides are very poorly formed so that there is normally a higher concentration of indirect or unconjugated bilirubin present in the blood.

As a side point, it is of interest that the administration of intravenous glucuronic acid in neonates with severe jaundice has not been very rewarding. It is an avenue of research that is still being pursued.

It is believed that indirect bilirubin is probably converted to a mesobilirubin within the brain and deposited in the nuclei as such and here it interferes with the normal metabolism of brain cells, particularly with phosphorylation, and so leads to necrobiosis.

The blood brain barrier is also known to be less mature in the premature infant than in the full term infant. Therefore, although many believe that this process is reversible in its early phases, it is often more severe and of more clinical importance in the premature infant.

Many Causes of Bilirubinemia

There are many causes of hyperbilirubinemia. The hemolytic diseases of the newborn are probably the most important ones confronting us but they are not the most numerous.

The commonest forms of hemolytic disease of

the newborn are those concerned with the Rh and the ABO antigens.

There was an interesting report in one of the pediatric journals recently on familial sperocytosis, that is congenital hemolytic anemia, in which the baby had a crisis on the second day of life and its serum bilirubin reached 35 mgms/100 ml. This baby received an exchange transfusion and made an uneventful recovery.

Other factors which are important in the production of hyperbilirubinemia are the so-called non-hemolytic diseases of the newborn. The most important one of these is physiologic jaundice. I think case No. 3 falls into this category.

Physiologic jaundice appears in all infants. If we did routine bilirubins on every infant in the nursery, we would find a rise above the so-called normal adult level. And in infants with less mature liver function, the bilirubin may rise as high as 30 mgms/100 ml. or more.

Exchange Indicated

If the bilirubin is rising rapidly, regardless of whether or not there is hemolytic disease, an exchange transfusion is indicated. There are a number of cases reported who developed kernicterus on a basis of apparent physiologic jaundice. Many people feel that it is safe to watch for irritability and feel that if the bilirubin is not rising at a rate greater than one mg. every six hours you can afford to temporize.

Another factor influencing development of kernicterus is perinatal anoxia. The anoxic infant has suffered some injury to the brain and this seems to increase the sensitivity of the brain to bilirubin.

Vitamin K in large doses, that is 10 mgs. or more, in the neonate or very large doses to the mother in labor appears to injure the blood brain barrier to such an extent that kernicterus may appear. It is also thought that Vitamin K in the forms in which we use it may be hepatotoxic and so we may have two factors operating here.

Any cerebral injury will increase the sensitivity of the brain to kernicterus. In familial non-hemolytic jaundice the bilirubin may rise very rapidly to 40 mgms/100 ml. or more. There are nine of these cases on record. Seven died and all had evidence of extensive kernicterus in spite of exchange transfusions. The two who survived were five and seven years old at the time of the report and had no clinical evidence of neurologic disturbance.

Gantrisin given to the neonate increases susceptibility and apparently lowers the blood brain barrier to the extent that kernicterus has been reported in about 90 per cent of prematures receiving it, and many of these were infants whose serum bilirubin never rose above 15 mgms. per cent. Kynex given to the pregnant women is also known to cross the placental barrier and has now been implicated in a few cases of kernicterus.

Other kernicterogenic factors of clinical importance which we may see are: neonatal bacteremia, infectious hepatitis in the mother, and maternal diabetes.

Dr. Ellis:

One very significant result of the basic information given by Dr. Smith is the successful development of the exchange transfusion. I think this has been a very major advance in medicine. With it pediatricians are saving babies that used to die and they are preventing serious complications in the babies who survive. Dr. Brian Moynahan has agreed to discuss this important aspect. Dr. Moynahan.

Exchange Transfusion: Dr. Brian Moynahan.

The exchange transfusion has two fairly simple reasons for being done in newborn babies with hemolytic disease. Number one, you are trying to prevent death in a patient who has potential or actual cardiac failure. Number two, you are trying to prevent hyperbilirubinemia and its possible consequence of kernicterus. You're not getting at the root of the disease. No one yet knows how to do that in cases of hemolytic disease of the newborn.

What the exchange transfusion will do well is to remove many sensitized baby cells and replace them with non-sensitized cells, usually those of an adult. Thus you diminish the reservoir supply of bilirubin for the immediate future. Another important thing accomplished is the regulation of blood volume and this is essential in managing cardiac failure. Many of these newborns, all hydrops certainly, and many of the others are in cardiac failure either severe or mild. By regulation of the blood volume you can help or hinder the degree of cardiac failure. And you may increase the oxygen carrying capacity by increasing the hematocrit of an anemic baby.

You also do other things, though not too well

or too efficiently. You can remove bilirubin from the serum; however, there is not as much of that removed at the time of exchange as you might think. However, with the exchange transfusion you remove some of the bilirubin in the intravascular system and you remove some of the antibody that is harming the baby's cells.

There are certain undesirable effects which you try to minimize when you do the exchange. If you reduce or increase the baby's blood volume too much, you immediately set up the possibility of acute cardiac failure. If you take too long doing the procedure, this danger is increased.

The citrate in ordinary transfused blood is a source of danger. It binds the ionized calcium in the blood in a baby already potentially in trouble because of myocardial anoxia. You may add to its troubles by the removal of the ionized calcium. Because of this, one of the things advocated by some people is the use of heparinized blood in an exchange transfusion.

Electrolyte Imbalance

There may be adverse effects of other electrolyte imbalance. I am sure that no one knows what all these adverse effects are—but there must be many when you use a bottle of citrated blood, sometimes days old, to replace 80 to 90 per cent of the baby's blood. You're accomplishing some rather marked electrolytic changes. However, it does appear that babies are, as the book says, in an excellent state of homeostasis and they usually seem to get over the trouble you are making for them.

Another undesirable effect of an exchange transfusion that must be guarded against is that these babies are known to be thermolabile. They must be guarded against loss of heat. They need oxygen, of course.

While there is quite a bit more known about what to do about these babies than there used to be, in my opinion at least, the final decision as to whether or not to do an exchange transfusion depends on the judgment of the doctor who is looking after the baby. One may use the figure of 20 mgms/100 cc. of bilirubin in the baby's serum as the time you are forced to do an exchange transfusion. Either that, or you have a baby who seems to you will soon have 20 mgms. of serum bilirubin.

Still, as Dr. Smith just said, you may have kernicterus develop at a lower bilirubin level. As far as I'm concerned, you often have warning of a baby that's to be in serious trouble from the antibody titer of the mother's blood. You have to start looking at that baby after it is born and look at it every half hour or so. If jaundice starts in a couple of hours and the Coombs is positive, you might just as well start doing an exchange transfusion immediately.

In some babies with a positive sibling history and a rising antibody titer in the mother in the late months of pregnancy, you'll have an uneventful delivery and an uneventful course in the baby. Here all the tests that can be done cannot replace your own judgment—by looking at the baby and having a nurse that's trained to warn you if the baby becomes jaundiced.

The technique of exchange transfusion varies all over the country but it doesn't vary essentially. The transfusion is generally done by the umbilical vein and its like threading jello when you're trying to get the catheter into the vein. The catheter used is generally a K 30. I use it because it happens to be handy around here, and you have the advantage of not only one opening at the end but side openings too, as in some other catheters. You put the catheter into the umbilical vein, pass it down to a place where you get free passage. Now, in my reading about this, I've learned it might be nice if you measure the venous pressure and that can be done by holding up the catheter vertically and simply measuring the pressure with a ruler.

Venous Pressure

And in the article from which I stole most of my ideas, they say that if the venous pressure is between four and eight cm. of water that's all right, but if it's up around 10 cm. you better start thinking about heart failure. In this case you should take off a fair amount of blood before you start giving it with the hope for a good effect on the state of the heart and the circulation. They advocate taking off between 30 and 60 cc. in such an instance, more if deemed necessary.

Once in your spot—they used to talk about a pool of blood; what actually happens is you find a spot where the vein doesn't collapse around the catheter and the blood seems to come in and out pretty easily. And you stay there and to do so you

tie the catheter down. You may have to move it here and there, but for the most part if you find one good spot you try to stay there, and you have it made.

Exchange Small Amounts

When we first started doing this, we used to exchange 50 cc. or more at a time. And I think we'll all agree—at least I'll agree with myself—it's much easier to exchange smaller amounts. It is easier technically because a large 50 cc. or 30 cc. syringe or even a 20 cc. will stick easily and they are cumbersome to handle. I use a 10 cc. or at most a 20 cc. syringe. I give and take 10 to 20 cc. of blood at a time. I start out getting the blood working with a little saline, and I give the baby about one cc. of aqueous heparin to help keep things from getting clotted up. Then I exchange 10 to 20 cc. at a time, trying to keep things as even as possible.

Calcium Gluconate

About every 100 cc. of exchange, I give the baby one cc. of 10 per cent calcium gluconate. You keep right on doing this until you've finished a unit of blood. At the end, you measure the serum bilirubin, once again use your clinical judgment, and worry about now or later giving a second exchange transfusion. I've had to repeat the exchange two and three times in some babies. This will depend on your clinical judgment of the baby as well as results of laboratory studies.

Fresh blood, of course, is best to use and the fresher the better. When the clinical history or maternal antibody titer suggests trouble, you can have a donor ready and the blood donation obtained shortly before or after delivery. The blood should be of the maternal type and should be crossmatched using donor cells and maternal serum. If there is a choice, the donor should be female. The fact that one should use maternal serum in crossmatching with donor cells makes it possible to have donors available ahead of time, and also one should remember that in the case of ABO sensitization, the maternal blood type will almost always be type O.

Exchange transfusions may be used for problems other than newborn hemolytic disease. Familial hemolytic anemia in crisis, Dr. Smith mentioned. Exchange is also used in poisoning, especially severe salicylism. I understand it is used in adult patients from time to time for intoxications of various kinds.

Of course, we pediatricians are all proud of this because it's about the only time we can make a big fuss, use a lot of blood, get everyone working for us and act like surgeons.

That about sums it up—the exchange transfusion.

Dr. Ellis:

So far, no one has taken their full ten minutes and this is something of a record. The summary of the problem of hemolytic disease of the newborn will be given by Dr. Tandysh. Immediately following this, we will have a discussion period.

Seminar Summary: Dr. Matthew Tandysh.

In summarizing this evening's discussion, we've had examples of hydrops or severe hemolytic disease due to Rh incompatibility, an ABO incompatibility, and a probable accentuated physiological jaundice.

Dr. Smith did an excellent job in reviewing the etiology of kernicterus. I think she mentioned something that is going to be investigated further and will probably add a lot to our knowledge and that's the business of certain drugs aggravating hyperbilirubinemia.

We had the pleasure of having Dr. Louis Diamond in Albuquerque on his way to the West Coast recently. We invited him to a pediatric meeting and he told us that there are quite a number of drugs that are being implicated now. Vitamin K is one, Gantrisin is another, and still others are coming to be recognized. Some of these are being used by obstetricians in sedating their mothers during pregnancy just prior to delivery and these are some of the tranquilizers. Compazine, Thorazine and Phenergan we know can produce jaundice in any patient.

Compete for Glucuronic Acid

It's been shown, according to Dr. Diamond, that these drugs compete for glucuronic acid in the hepatic conjugation process. And so even the child who has no incompatibilities—say, the mother is type A, Rh positive; the baby type A, Rh positive—there is a certain amount of hemolysis that takes place early in the neonatal period and one product of this hemolyzed blood is bilirubin and in a situation where the glucuronic acid is already spoken for, so to speak, then the indirect bilirubin may rise abnormally.

I can't help feeling that much of our excessive

physiological jaundice that we speak about is sort of a coverup for our own ignorance. I'm sure that in days to come we will begin to classify more and more of these so-called physiological jaundices into more specific categories.

One of the drugs mentioned by Dr. Diamond was Dilatin. Mothers who have convulsive disorders may receive Dilatin and this drug has been implicated as a competitor in the glucuronic acid conjugation system.

Also phenacetin, which is a component of our APC pills. Vitamin K and Gantrisin have been mentioned. Chloromycetin, as you know, given to small babies may produce the so-called "grey disease". That is an entirely different syndrome. But Chloromycetin is also detoxidified by the glucuronic acid system and in a newborn baby who has some extra hemolysis it is going to compete with bilirubin.

Heparin Competes

Now, an interesting point brought out at the state meeting by Dr. Day was that heparin may be implicated in competing for the glucuronic system. As both Dr. Smith and Dr. Moynahan mentioned, some people have been very unhappy with citrated blood since this does immobilize the free calcium in the baby's system and have taken to using heparin. Dr. Day feels that heparin will definitely compete for the glucuronic system and may aggravate the situation.

I had two other brief subheadings that I want to mention. Dr. Moynahan covered one very well and that is the problem facing the pediatrician as to when to exchange the baby. There are various charts that have been computed so that if you know the baby is six hours old and its bilirubin is 13 mgms., you can anticipate that he is going to go above 20 mgms. You can exchange him even though his bilirubin is less than 20 mgms. at the time.

With a previous history of exchange transfusion, I think you're justified in transfusing the baby as soon as you know the Coombs is positive.

The problem becomes more difficult when the baby gets unexplained excess jaundice. Here we classify it as a physiological jaundice but then when the baby is 50 some hours old, and we discover his total bilirubin is 19 mgms/100 ml., we are obligated to repeat it. Now at three days of age, the serum bilirubin is 22 mgms/100 ml., we must face the problem of exchanging the baby or sitting and waiting. This is a difficult conflict. The level of 20 mgms/100 ml. is not a precipice. I'm sure that many babies have developed kernicterus with bilirubins below 20 and on the other hand, we have babies where the bilirubin rose to 40 mgms/100 ml. and we've had no measurable cerebral damage.

And of course, one of the problems we are faced with here is the law suit. Given a child who has an I.Q. of 80 who had a bilirubin of 19 when he was a baby; is there any real proof that this low I.Q. is the result of failure to exchange the baby? Also, I don't think that people are fully aware of the risk involved in exchange transfusions. At the best centers, it runs approximately one per cent mortality and this may be higher in other places.

Discussion:

Dr. Tandysh:

I was asked at this time to attempt to answer any questions from the floor or direct them to the right people.

Dr. Ellis:

I'd like to ask Dr. Smith if she remembers the history well enough to know if there might have been a drug involved in case No. 3?

Dr. Smith:

I tried to find this out from the attending physician recently, and I was not able to find a history of drugs.

Dr. Moynahan:

I think there is one other thing I ought to mention. The second case was mine. In 1954, we thought that ABO sensitization did not cause kernicterus. It happened to this child and I had one other since and the same thing happened. ABO problems have to be watched carefully and it might behoove the obstetrician to do ordinary typings on mothers as well as Rh typings. The latter they usually do. Another thing about this case, the lab work concerning the immune anti A antibody titer was not available till several days after delivery.

Dr. Ellis:

At that time we had to send the blood away for an immune type antibody titration

Dr. Ann Hunt:

I'd like to comment that ABO incompatibility is more common than the Rh incompatibility and both the pediatrician and obstetrician are up a tree because there isn't any prenatal test available other than just the simple typing of the mother's blood to give you any clue that you might have trouble. Therefore, the most important observation is the one that the nurses make in telling you when jaundice first appears and notifying you if the jaundice appears in the first 24 hours. This is about the only clinical clue that you may have a problem due to ABO sensitization.

Dr. Willis Pickel:

Do you think that we are running a risk by giving Thorazine along with Demorol to mothers during labor?

Dr. Tandysh?

I have not had personal experience with this but according to Dr. Diamond there is no question that Thorazine is in competition in the glucuronate system. There must be some explanation for a baby who has no demonstrable incompatibility who runs a bilirubin in the range of 15 to 20 mgms/100 ml. or even higher. What that explanation is I don't know, but I can't help feeling that in some of these cases drugs are definitely implicated. Also, though I don't know what the statistics are, I can't help feeling that the incidence of more than just a mild jaundice is increasing.

Dr. Ellis:

Isn't this particularly true in premature babies?

Dr. Tandysh:

Yes, because they have the additional problem of an immature hepatic system. As a matter of fact, it is interesting how Gantrisin was implicated. A study was made in a New York Hospital in their premature unit, using various combinations of antibiotics, to see if any particular combination was more effective than another in preventing infections in premature babies. In analyzing their results, they were surprised to see that they had lost several babies on a penicillin-Gantrisin combination, due to kernicterus as demonstrated at autopsy. Further investigation revealed that Gantrisin was the offending agent. Consequently, many pediatricians do not use Gantrisin in premature babies either prophylactically or therapeutically.

Dr. Whipple:

Should one not give Gantrisin to the mother?

Dr. Tandysh:

I'm not sure about that. I don't know if Gantrisin passes the placental barrier and if so, to what extent. I don't think Gantrisin has been implicated in causing or aggravating hyperbilirubinemia in term babies. The studies mentioned were in immature babies.

Dr. Ellis:

If there is no further discussion, I would like to thank our speakers for giving us so much interesting and useful information tonight. Our next seminar will deal with the problem of acute renal failure.

Phoenix Surgical Society Plans Series of Meetings

The first meeting of a series for 1960 and 1961 will be held by the Phoenix Surgical Society December 15, 1960, in the Casa Blanca Inn at Scottsdale, Arizona, on the subject of "Extended Operations on the Intestinal Tract." Dr. Owen H. Wangensteen, president of the American College of Surgeons in 1960, will be the speaker.

Three other meetings have been scheduled on February 14, April 11, and May 9, 1961. All except the last will be held in the Casa Blanca Inn in Scottsdale. The place and subject of the final session will be announced at a later date.

The scientific meetings will be held at 8 p.m. and will be preceded by dinner at 6:30 p.m., to which physicians and surgeons of the area are cordially invited. Reservations should be made, not later than a week in advance of each meeting, to Dr. W. H. Cleveland, secretary of the Phoenix Surgical Society, 1313 N. 2nd St., Phoenix, Arizona.

On February 14, 1961, Dr. Richard B. Cattell, chief of surgery at the Lahey Clinic, will speak on "Surgery of the Biliary Tract." On April 11 Dr. William D. Longmire, Jr., professor of surgery at the University of California, Los Angeles, will speak on "Surgery of Thyroids and/or Parathyroids." Speaker for the May 9th meeting will be Dr. Isidor S. Ravdin, president of the American College of Surgeons for 1961. Dr. Ravdin is the John Rhea Barton professor of surgery at the University of Pennsylvania.

Clinical Pathological Conference

R. E. Thomason General Hospital, El Paso

Case No. 1479, September 30, 1960

F. P. Bornstein, M.D., *Editor*

Presentation of case by W. R. Gaddis, M.D.

History: Dr. Nathan Kleban:

A jaundiced 22-year-old unmarried woman was admitted to the hospital on June 18, 1960.

Excessive bleeding after minor injuries harassed the patient beginning at age six when she "nearly bled to death" from trauma suffered in a car accident. Three years before, at age three, splenomegaly was first detected. Neither spontaneous hemorrhage nor excessive menstrual bleeding had occurred.

Evaluation of the splenomegaly was performed in another hospital in January, 1957. A Grade I short blowing systolic heart murmur was heard. Abdomen was slightly obese. Four to five cm. below the left costal margin the tip of the spleen was felt. Liver was not enlarged. Lymphadenopathy was not present.

Blood counts, bleeding and clotting time and platelet morphology were normal. Prothrombin time was variably prolonged. Platelet count was 102,000, Rumpel-Leeds test was positive. Liver function studies were within normal limits except for a slightly elevated alkaline phosphatase. Lupus erythematosus cells were not found.

Chest X-ray, esophagram and upper GI series were normal. Tortuosity of the splenic vein with numerous varices about the stomach but no portal vein obstruction was demonstrated on splenoportagram at the time of splenectomy.

Portal vein pressure was measured but not recorded in the available summary. One pint of blood was given during surgery. Biopsied liver tissue was reported normal. Platelet count rose to 250,000.

Congenital, bilateral, high-frequency perceptive deafness was found by the ENT service, which also discovered speech defect due to hearing loss, enlarged naso-pharyngeal opening and a high palatal arch.

Menstrual cycles with duration of three days and interval of one month lengthened to intervals of two months after splenectomy. There was no menstruation after January, 1960.

An illness which included urinary burning and jaundice lasted for about two weeks in March, 1960. The patient was treated for kidney trouble with pills by a doctor.

Anorexia, nausea and intermittent vomiting began suddenly four days before admission. Nitrofurantin (Furadantin) was prescribed when the patient was seen in the emergency room the next day. Yellow stools without diarrhea, dark yellow urine, jaundice, and swelling of the abdomen and lower legs then appeared, and the patient returned for admission to the hospital. She did not complain of pain.

Family History:

Parents were living and well. There was no known history of any illness in the family similar to that of the patient. Nor was there any known blood or bleeding disorder.

Physical Examination:

T. 99.2; P. 112; R. 22; B. P. 130/80; Wt. 122½ lbs.

The facial skin had a brown mottled appearance. Sclerae were deep yellow. The abdomen was soft. There was an upper abdominal surgical scar. The lower abdomen was protruberant. Deep palpation in the right upper abdominal quadrant provoked slight pain. One examiner described the liver as 3+ enlarged. Pelvic examination was described as probably normal by an Ob-Gyn consultant, who found the uterus and adnexal regions difficult to palpate because of ascites. Ankles and feet were edematous.

Hospital Course:

Following admission the patient complained of abdominal pain only the first night. Temperatures up to 100 were recorded almost daily for two weeks. There was fair appetite and no vomiting. On June 25 one examiner thought a non-tender liver edge was palpable two cm. below the right costal margin. Vague abdominal distress, intermittent jaundice and findings of ascites were described on June 29.

Pathologist's diagnosis of "Tissue invaded by malignant tumor" was made on needle liver biopsy on June 30. The report added: . . . "the material is inadequate for a definite diagnosis."

Ascitic fluid was removed by paracentesis on several occasions from July 2 to 7. Fluid removed on July 7 was reported: "Positive for tumor cells."

Laparotomy to obtain liver tissue for biopsy was done on July 15. About four liters of bile stained fluid was found in the abdomen. The liver was studded with nodules. "The edge of the liver looked like a bunch of big, black grapes."

Jaundice deepened. The patient became drowsy, restless, confused and died on August 1, 1960.

Laboratory Findings:

X-rays: 6-25-60—Chest: Healthy chest; survey film of abdomen, "findings consistent with ovarian tumor." 7-4-60—Abdomen: Re-examination of the abdomen and comparison with previous study reveals a further haziness and an increase in the size of the previously observed findings consistent with ovarian tumor with accompanying ascites. 7-7-60—Complete skeleton survey and I.V.P. Intravenous pyelogram: "Normally concentrating and draining kidneys. No evidence of obstructive uropathy. No evidence of metastatic bone disease was found in skeletal survey."

Blood counts: 6-20-60: Hb. 12.0 gms., Ht. 48%, WBC 13,400, Eosin. 3, Juveniles 4, Stabs. 7, Segs. 54, Lymphs. 31, Monos. 1; 6-25-60. Hb. 12.0 gms., Ht. 43%, WBC 13,600, Eosin. 3, Segs. 63, Lymphs. 31, Monos. 3; 7-14-60: Hb. 14.2 gms., Ht. 47%, WBC 16,800, Stabs. 6, Segs. 75, Lymphs. 18.

Chemistry: 6-18-60: Van den Bergh Direct—6.75 (Total 13.75), Total Protein—7.2 gm.%, Albumin—3.8, Globulin—3.4, A/R—1.1. 6-22-60: Glucose—77 mg.%, Van den Bergh Direct—4.62, Indirect — 8.74; 6-23-60: Glucose — 65 mg.%; Phosphatase, Alk.—9.8 units. 6-24-60: Total Protein—7.2 gm.%. 7-1-60: Total Protein—6.8 gm.%, Albumin—3.7, Globulin—3.1, Van den Bergh Direct—5.0. 7-3-60: Total Cholesterol—244, Nonprotein Nitrogen—21, Phosphatase, Alk.—11.8 units, Total Protein—6.6 gm.%, Albumin—3.3, Globulin—3.3, Urea Nitrogen—8.5. 7-6-60; Van den Bergh Direct—5.4, Indirect—10.16. 7-7-60: Urea Nitrogen—8.5. 7-11-60: Van den Bergh Direct—6.48, Indirect—14.52. 7-14-60—Van den Bergh Direct—8.44, Indirect—16.3. 7-15-60: Cholesterol, Esters—92 mg.%.

Sedimentation rate—6-20-60: 26 mm./60 min.

Platelet count—6-20-60: 1,944,720. 6-25-60: 776,600.

Coagulation time—6-20-60: 4′ 20″, bleeding time, 2′ 16″.

Prothombin time—6-20-60: 82%. 6-25-60: 77%.

Thymol turbidity—6-20-60: 2.5 thymol units. 7-1-60: 3.0 units.

Urinalyses—6-16-60: Orange, hazy, acid, S. G. 1.015, Albumin neg., Sugar neg., WBC 2-3, RBCO, Ep. cells few round, casts few finely granular, large amount of mucus. 6-20-60: Bile positive, urobilinogen Pos. 1:80. 6-23-60: Bile positive, urobilinogen negative. 6-30-60: Urobilinogen negative. 7-3-60: Bile strongly positive, urobilinogen pos. 1:100 dil. 7-15-60: Amber, hazy, acid, S. G. 1.010, Albumin neg., Sugar neg., Ep. cells rare sq., 1-2 coarsely granular casts, loaded with motile bacteria.

Coombs tests—6-20-60: Negative. 6-20-60—Negative.

Serology—6-21-60: Negative.

Cephalin flocculation—24 hours negative, 48 hours 1+ (6-22-60).

Erythrocyte fragility—6-23-60: Patient—Initial hemolysis .48%, Complete hemol. .32%. Control—Initial hemolysis: .48%, Complete: .36%. Normal initial—44-40, Normal complete—32-28.

Blood smear—6-24-60: Morphology of red cells reveals them to be microcytic, hypochromic in appearance. There is a left shift in the granulocyte series, otherwise no abnormalities are noted.

Feces—6-22-60: Negative for parasites or ova. 7-6-60: Negative for occult blood, many monilia seen.

Glucose tolerance—6-24-60: Fasting—48 mg.%, Half hour—105 mg.%, 1 hour—150 mg.%, 2 hours—200 mg.%, 3 hours—185 mg.%, 4 hours—140 mg.%.

S.G.O.T.—6-24-60: 76 units.

B.S.P.—6-25-60: 4% retention after 45 minutes. 7-1-60: 40% retention after 45 minutes.

Friedman test—6-28-60: Negative.

Ascitic fluid—7-2-60: S.G. 1.034, Total protein 2.4 gm.%, Albumin 1.5 gm.%, Globulin—0.9 gm.%, bile positive, diff. cell count, 96 lymphs., 4 segs.

Ascitic fluid culture—7-5-60: no growth.

Ascitic fluid for tumor cells—7-2-60: Some mesothelials, and moderate numbers of round inflammatory cells.

Vaginal smear—6-23-60: No tumor cells seen.

Dr. F. P. Bornstein:

I would like to make a few preliminary remarks. There were two liver biopsies taken. The first one was a closed needle biopsy, with the complete result of nothing, which speaks for the value of needle biopsies. The second biopsy showed nothing but tissue invaded by malignant tumor, again a needle biopsy. We had a few clumps of cells which were obviously malignant. I considered the possibility of a neuroblastoma. I rejected it, among other things because of the age of the patient, which is really not a valid consideration on purely morphological grounds.

Clinical Discussion: Dr. W. R. Gaddis:

In spite of the very extensive protocol, you will confess when I am through that I am about as ignorant of the conditions here as could be. But let's state the problem as briefly and as succinctly as possible. Here is a fulminating jaundice and progressive downhill course in a 22-year-old unmarried woman.

We have a positive history of splenomegaly and of a splenectomy, for an apparent thrombocytopenic purpura, 19 years prior to admission to this hospital for this particular illness. To my mind this of course is the chief red herring in the discussion of this case. Has it any pertinent relationship to her final illness?

I would like to review briefly for you the last two paragraphs in the protocol, including the familiar history. There was an illness which included a urinary burning and jaundice lasting for about two weeks in March, 1960. This was some three months prior to her admission to the hospital.

The patient was treated for kidney trouble with pills by a doctor. In the present illness, anorexia, nausea and intermittent vomiting began suddenly four days before admission. Furadantin was prescribed. I don't know the foundation for this, since the drug normally, at least in my patients, causes an increased amount of the same type of symptomatology.

When the patient was seen in the emergency room, the next day, she had yellow stools without diarrhea, dark yellow urine, jaundice, and swelling of the abdomen and lower legs. She did not complain of pain. I would like to point out that the progressive final development of her jaundice was of sudden onset along with the appearance of ascites and edema, dependent type.

Her parents were living and well. There was no known history of any illness in the family similar to that of the patient, nor was there any known blood or bleeding disorder. This patient of course, if you reviewed the history, had had a disorder of the hematopoietic system some time in the years previous.

So examination then on her admission revealed the presence of clinical jaundice, rather marked; ascites, dependent edema, enlargement of the liver, and a questionable "negative" pelvic examination. The examiner stated that he was unable to be certain of his findings on this examination because of ascites.

Whether subsequent examination after paracentesis had been performed might have been of help we don't know. I am going to ask Dr. Ravel if he will discuss the X-rays before I continue with my discussion.

X-Ray Discussion: Dr. Vincent Ravel:

The chest X-rays showed no evidence of metastatic disease to the visualized bony thorax, shoulder girdles of the lung fields. The two survey films of the abdomen revealed the soft tissue haze that is consistent with ascites; there again no evidence of metastatic disease to the lumbar spine or pelvis is seen.

I see no significant intra-abdominal calcification, the psoas shadows are hazy, naturally with the onset of the fluid in the abdominal cavity. We have an intravenous urogram on this patient which was interpreted as being within normal limits, there is no displacement or obstructive uropathy. The bladder contour was regular in outline.

Very frequently in a young person when you have a questionable soft tissue mass in the pelvis with ascites, the ovary is the source of the trouble and so we suggested a possible malignancy or neoplasm of the ovary.

Dr. Gaddis:

To continue then along the lines that we are talking about here in the discussion of this patient: I believe that we saw this patient in our clinical conference on at least two occasions, or discussed the findings relative to her problem. This led to the needle biopsy of the liver which Dr. Bornstein decried and which the surgeons who were present on that occasion also decried, and we finally were able to have an open biopsy done.

Let's look just briefly at this maze of laboratory procedures, and there were a great many of them. I shan't go into them in detail. The patient had 12 grams hemoglobin on admission. For this hospital that's a good report. She did have a persistent leucocytosis. This was present throughout her illness as many times as we sampled her circulating leucocytes.

There was evidence of decreased hepatic function. She had a disturbance of her A/G ratio, she had evidences of edema which may have resulted from that. Her glucose was persistently low which may have represented an inability of the liver to convert the glycogen into glucose. She had an elevation of her serum bilirubin which went up rather high just prior to her death, about 15. If the pediatricians had been taking care of this patient, probably they would have been very concerned about the possibility of central nervous system damage.

Her blood urea nitrogen was not particularly remarkable; as a matter of fact both that and the NPN were low. I felt that the liver function tests as determined were not indicative of inflammatory liver disease. As such we could probably discount the onset of her illness as being due to an inflammatory type disease. Her cephalin flocculation and her thymol turbidity were both within normal limits as reported by the laboratory.

This history is that typical of the onset of acute hepatitis, including the febrile course that the patient had in the hospital. The evidence for the presence of tumor is a positive biopsy and ascitic fluid. We did not find any evidence of blood dyscrasia.

I will discount that one platelet count of over a million. I don't feel that that is germaine. If you are aware of the limitation of the method you must realize that the megakaryocytes will produce platelets and they are not always destroyed as rapidly and consequently one occasionally gets a precipitous rise in platelets which may not necessarily persist throughout the course of the patient's life. Therefore I do not believe this patient had blood dyscrasia.

One presumptive diagnosis that we have to make of this patient is that we have an intermittent obstructive jaundice. She was jaundiced for a relatively brief period of time three months prior to her admission, and only on her final admission did her jaundice become fixed and increase from that time on. If this is due to malignant disease we have to find out whether this is a metastatic lesion or a primary lesion; and what portion of the anatomy it involves.

To produce ascites and jaundice simultaneously a malignancy involves a region very close to the porta hepatis where the three main structures enter the liver; namely, the portal vein, the hepatic artery, and the common duct. Some place along this channel this patient is having an obstructive problem, probably not due to inflammatory disease but rather to the presence of a malignant disease; although this is a young person.

If we can assume from the biopsy that the tumor is at least in one location metastatic, where is it primary? The radiologist has given us some help as to where it probably isn't. It probably is not in a major area which is drained by systemic circulation.

In other words, most commonly tumors outside of the peritoneal cavity metastasize first by way of the blood stream. They are short-circuited into the pulmonary tree. Therefore the tumor must be between the two diaphragms, that is, the respiratory diaphragm and the pelvic diaphragm. It undoubtedly involves chiefly structures which are very close to the portal circulation. One must not discard the idea of widespread peritoneal extension.

Then we must ask ourselves, is the tumor entirely intra-peritoneal, is it retro-peritoneal, or extra-peritoneal; is it portal or extra-portal in its origin? I don't know whether the tumor spread by seeding, or by lymphatic spread, as occurs in the extension of carcinoma from the lower bowel. Could it be primary in the liver? Well, let's survey briefly the things that may give us some indication.

Certain structures within the abdominal cavity are chiefly drained by the portal circulation; namely, the stomach, duodenum, jejunum and ileum. We have to consider structures like a Meckel's diverticulum and the rarer malignancies that happen in appendices, particularly carcinoid tumors. They also happen in the terminal ileum and the colon. The primary lesion could be in the ascending colon, transverse, descending, sigmoid, recto-sigmoid; but not in the anus because the latter drains to structures outside the peritoneal cavity.

It could also be due to a malignancy of the gall bladder itself, of the ampulla of Vater, or of the pancreas. In this patient we can eliminate in all probability the spleen, although accessory spleens do exist. The lymphatic system and any of the reticulo-endothelial structures could be involved,

and this of course includes liver and spleen and other lymphatic structures within the peritoneal and abdominal cavity.

From the genital system we can have extension from the uterus but this is neither common from the fundus nor the cervix. The fundal carcinoma most commonly spreads through the systemic circulation and the cervix through its lymphatics. The ovarian cystoadenocarcinomas have a different spread, namely by peritoneal implantation and local seeding.

I recall operating on a patient in this hospital who had proven gall bladder disease with stones, and in performing the incision to remove the gall bladder we found peritoneal implants in the omentum and the parietal peritoneum from a very small carcinoma of the right ovary. This patient succumbed to this carcinoma within a period of six months, even though the operative procedure otherwise was very satisfactory.

I choose to rule out the presence of carcinoma in the stomach and duodenum, because we have an extreme lack of symptoms or signs which would point to it. We have no blood, for instance, in the stool. This helps us to decide at least that we probably have no open malignancy of the wall. It does not rule out the presence of tumors like lymphosarcomas.

The small bowel tumors of a malignant nature are very uncommon, they usually give rise to some intermittent cramping, distention, and symptoms of intestinal obstruction. This patient had none of these; I don't feel that this fits. The same thing applies to tumors which arise occasionally from the embryologic remnants in a Meckel's diverticulum.

I don't think we can rule out tumors of the large bowel quite as easily. I have seen one carcinoma of the transverse colon in a 16 year old boy; it caused his death. It is quite startling how often a patient can be seriously ill from malignancy extending from an ovary and not have any symptoms. This patient did have a disturbance of her menstrual history. Whether this had any relationship to changes and alterations in her ovarian function would only be conjecture.

I believe she died in hepatic coma and as a result of hepatic failure. But now we must once again pin ourselves down to the most difficult task of deciding where was the origin of this particular tumor. I said very little about the possibility of pancreatic tumor in this patient. We know that she did have a persistent low blood sugar which made me think of some adenocarcinoma of the islets of Langerhan's. They occur very infrequently. They are not common, I assure you. They occur as very small lesions, five mm. in diameter or less, they are very difficult to find. The pancreas could be an ideal site for the origin of this patient's disease, and it would remain relatively quiescent over a long period of time.

So I am going to have to stick my neck out on the basis of what we know from this protocol and from the course and progress of this patient's suffering. I believe that she had a malignant disease which involved the area of the hepatic trinity; of the common duct and portal vein and the hepatic artery with an increasing obstruction to cause her to have an obstructive type jaundice with destruction of the liver and death in hepatic coma. I think the probable primary source of this patient's tumor was the pancreas, although she was a very young woman, and I know that I have probably pinned myself down too well in discussing this; but we have seen a number of patients through the years go through this hospital that have violated the ordinary rules.

Dr. Solomon Heller:

This particular case presents a very fascinating total history and it would be interesting to try to sew the whole thing up into more or less one historical and final end. There was splenomegaly arising or found at the age of three, and later the thrombocytopenia or apparently splenic inhibition or dysplenic disease, which led to the removal of the spleen in 1957. Then came jaundice, obvious ascites, and etc. I would wonder whether this whole thing is not just one picture. The so-called Banti's syndrome has fallen quite a bit in disrepute, but frankly this case seems to fit, until the final phase, into such a syndrome or a congestive splenomegaly.

The etiology has been batted around quite a bit, but it is thought that somewhere along the line there is an obstruction somewhere in the portal system, perhaps the splenic vein, which leads to enlargement of the spleen, later cirrhosis, ascites and so forth. I would wonder whether this patient did not, at the time of the previous surgery, have some underlying cirrhosis; and on top of that developed a hepatic neoplasm.

The primary tumor which may be quite anaplastic may be a primary hepatic sarcoma rather than a metastatic tumor from elsewhere. I feel that this would fit the entire picture very nicely and perhaps too well to be true.

Dr. Pablo Ayub:

I would like to say that the complication of jaundice and ascites would go well with a nodular liver. I think that with the history, the findings, the presence of nodules, the most likely thing is a tumor which obstructs not only the biliary system but the afferent circulation of the liver.

Clinical Diagnosis: Carcinoma of the liver.

Dr. Gaddis's Diagnosis: Primary malignancy of pancreas.

Pathological Diagnoses: 1. Multicentric primary adenocarcinoma of liver arising in cirrhotic liver. 2. Metastases to lungs. 3. Extension into gall bladder. 4. Severe icteric nephrosis.

Pathological Discussion: Dr. F. P. Bornstein:

On autopsy there was an extremely emaciated, fairly young woman. The abdominal cavity contained about 2000 cc. of fluid. The only thing in the chest was a few tiny superficial tumor nodules which were obviously metastatic, and yellow. The liver weighed 2100 grams.

The liver surface was coarsely nodular. The nodules measured between one and two cm. in greatest diameter. Some of these nodules were bluish-green, others grayish-white. The liver cut with increased resistance. On cut section there was total loss of the hepatic pattern. These nodules mainly varied from a few mm. to several cm. Some were confluent, some appeared yellow, and others were hemorrhagic. Thin bands of jaundiced liver tissue were seen between these nodules.

The gall bladder was removed after dissection of the liver. The wall of the gall bladder was found to be intact, and there was no direct invasion from the liver into the wall of the gall bladder. Upon opening the gall bladder we found a pedunculated tumor which arose actually in the cystic duct. The common bile duct was not affected. The mucosa of the gall bladder was pale and flattened out. Stones were absent (Fig. 1 and Fig. 2).

On cut surface you can see the tumor nodules, but you also can see that in addition the bands of fibro-connective tissue are totally irregular, so that you have tumor nodules embedded in a coarsely cirrhotic pattern. Here is a close-up to see the real change in the liver which permits us to say that these are tumor nodules in a cirrhotic liver (Fig. 3).

On further sectioning it becomes obvious, and histology confirmed it, that the polypoid tumor of the gall bladder actually was a tumor nodule that had broken through the wall of the gall bladder. It was not primary of the gall bladder but a direct extension of the liver tumor. This also brings out the point that the shape of tumors is greatly dependent on their seed bed, if they are surrounded by solid tissue they form a different shape from tumors pushing against a soft mucosa.

The diagnosis here is a primary hepatoma in a young woman who already had cirrhosis of the liver, producing obstructive symptoms. On the basis of this cirrhosis she developed a hepatoma. If we would see this pattern in a person 30 years older we wouldn't be too surprised. I think Dr. Heller's speculation that the splenectomy was done in an earlier stage of the process, already non-malignant hepatic damage, is quite correct.

Dr. Gaddis:

I would like to say one thing in closing. Of course this has not made me feel very different. I think I pretty well got to say at least all the things that produced the external symptoms as far as this patient is concerned. I am distrubed by the presence of a primary hepatoma in this age group. This is not to say it couldn't happen: it shouldn't happen. The one case that I have seen previously was in a liver which grossly appeared normal though much enlarged. This present patient had cirrhosis to start with and the nodularity of her tumor was due to the cirrhosis.

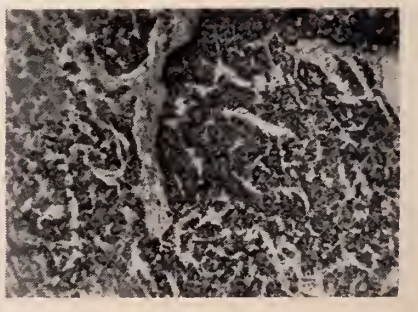
Fig. I



Fig. II



Fig. III



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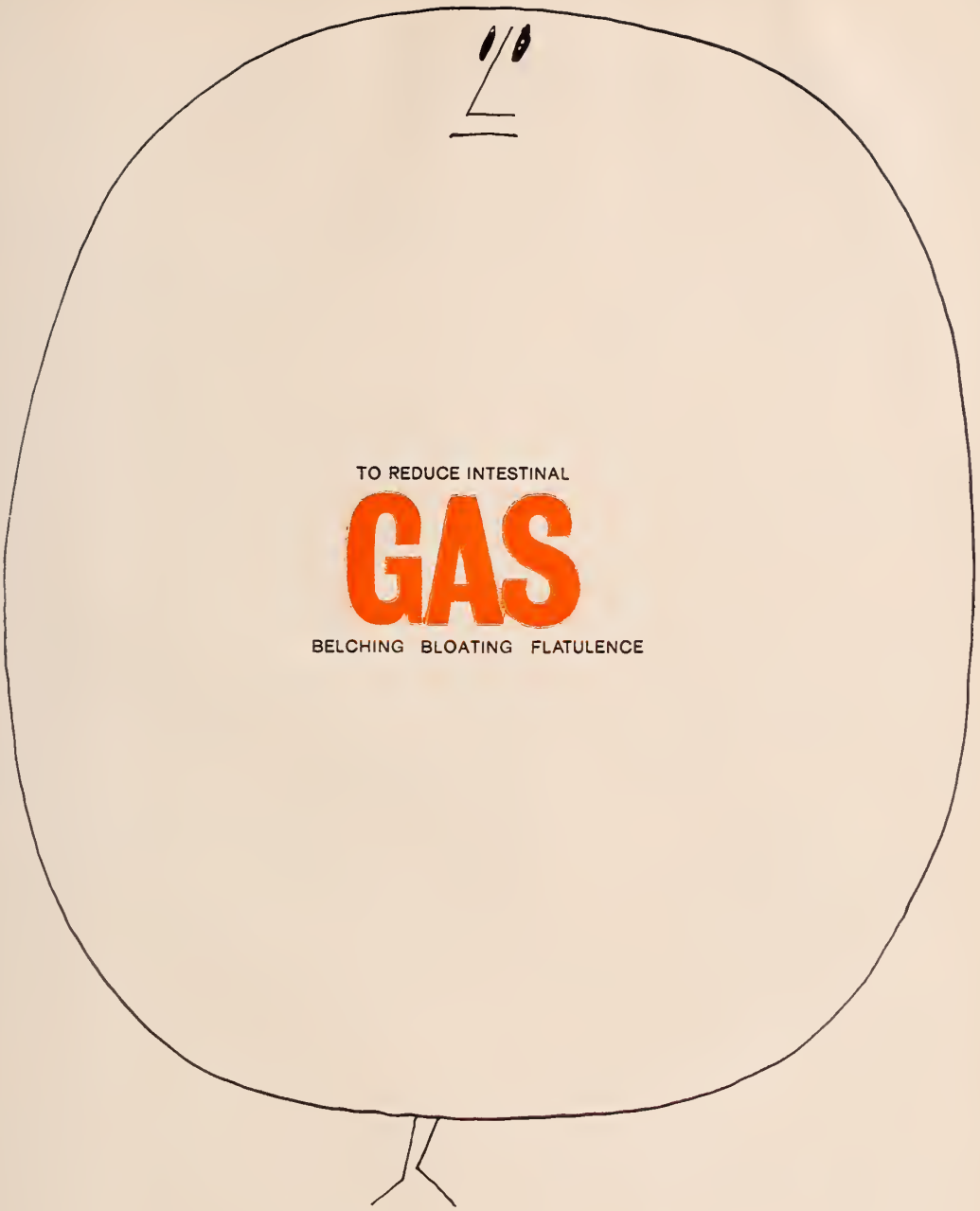
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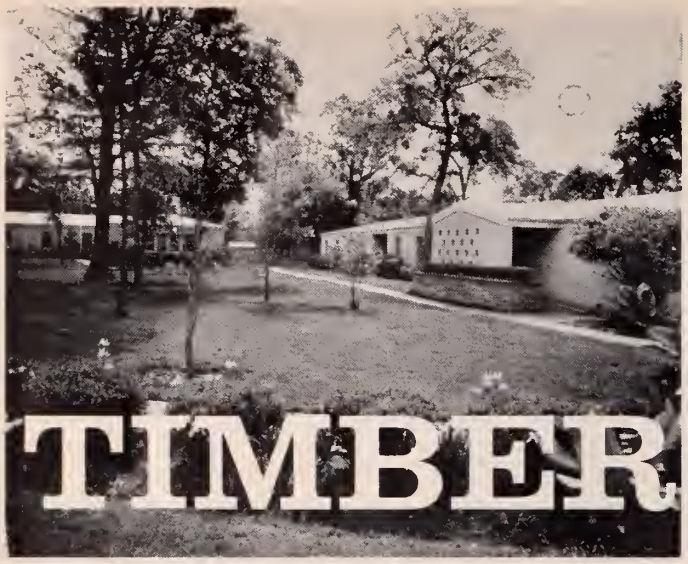
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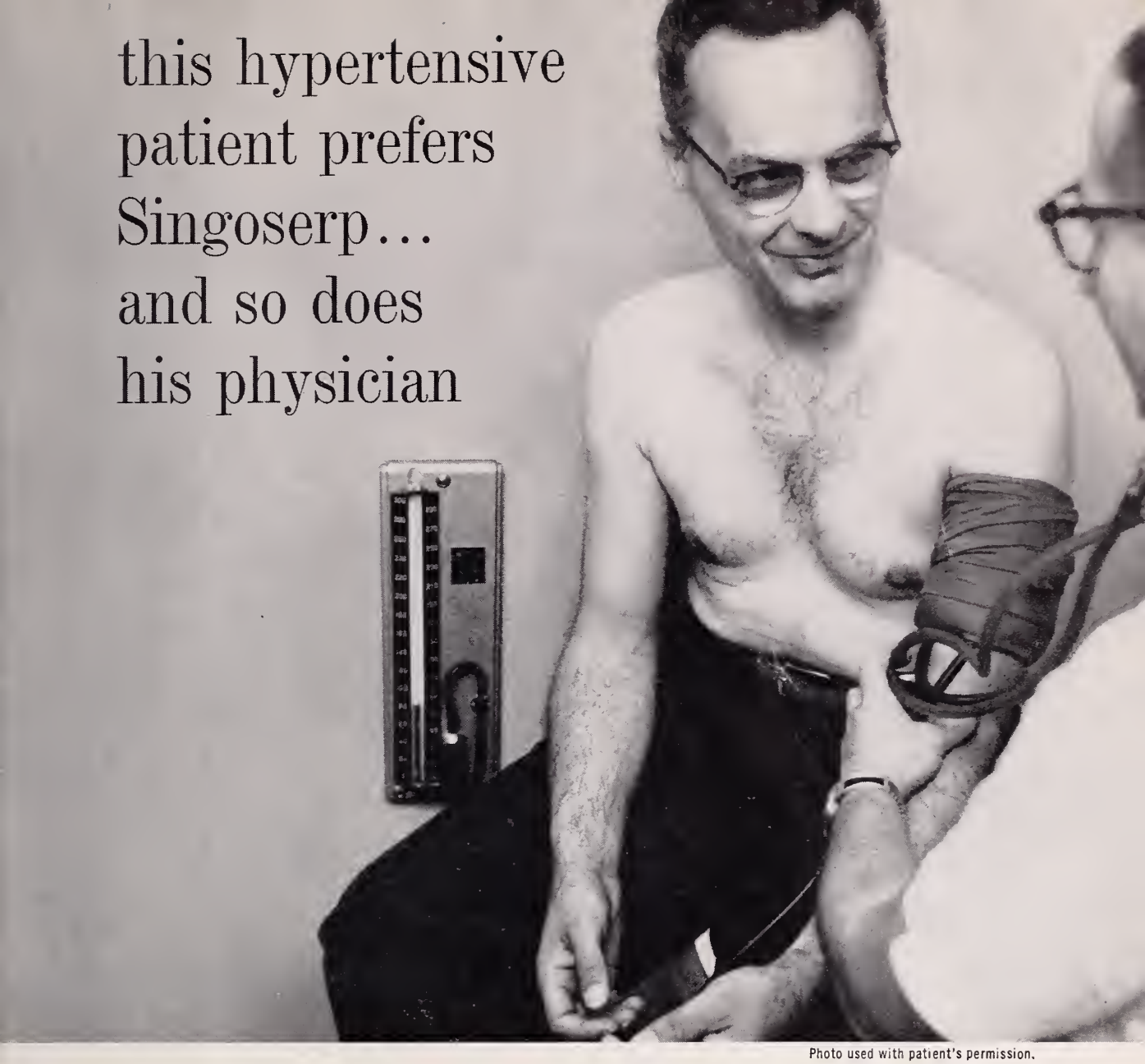


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